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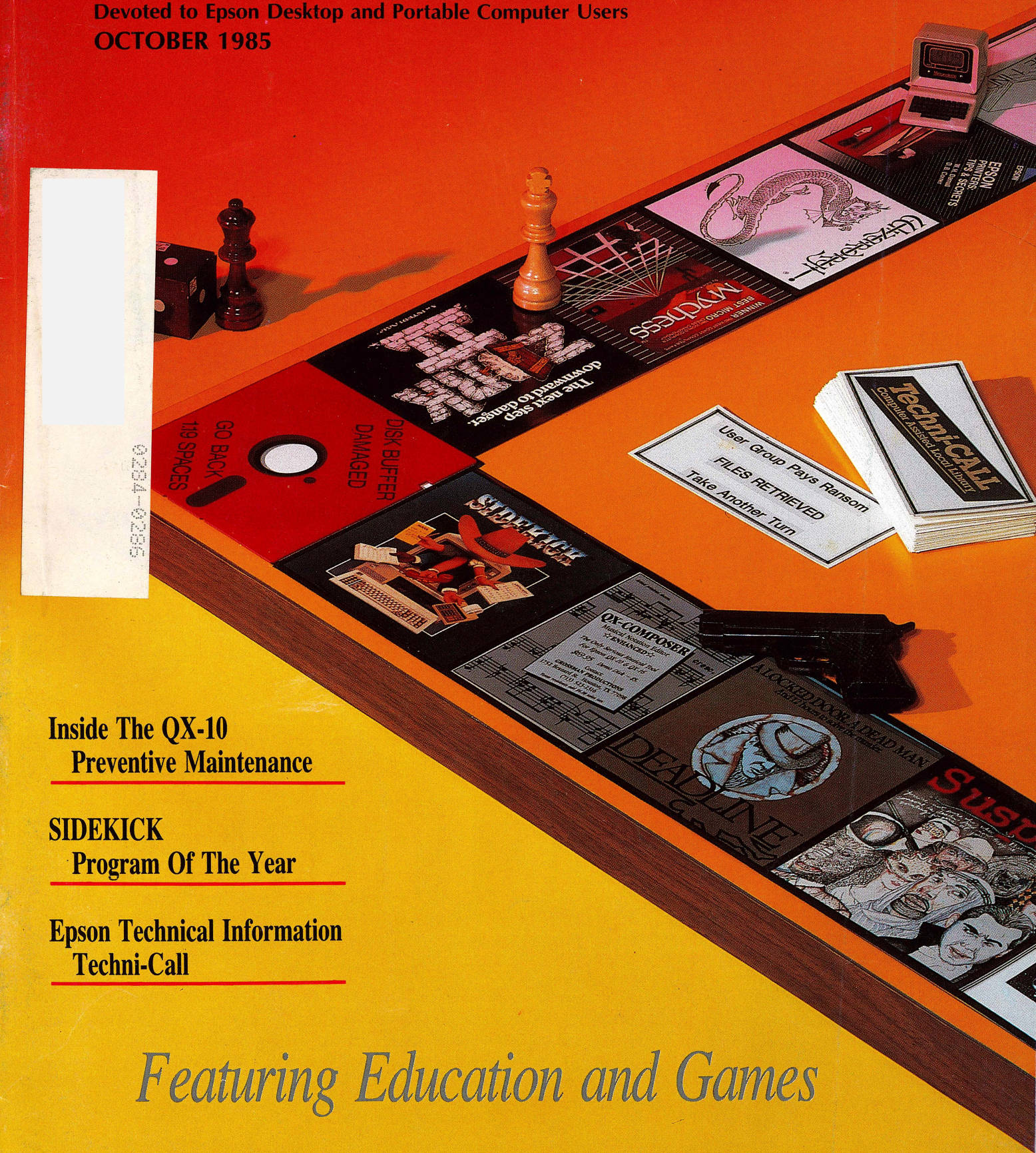
OCTOBER 1985



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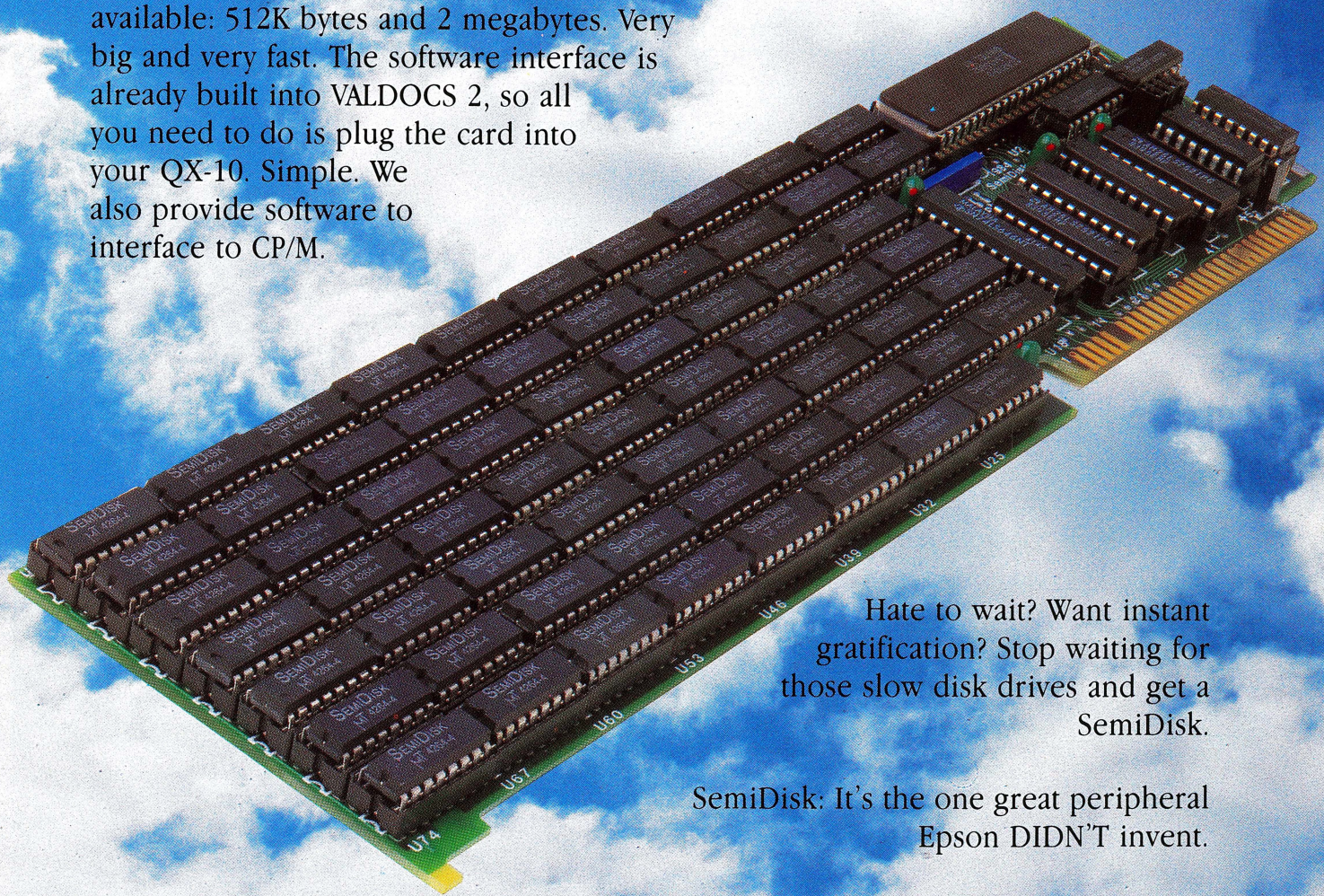

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OCTOBER 1985 VOLUME 3 NO. 9

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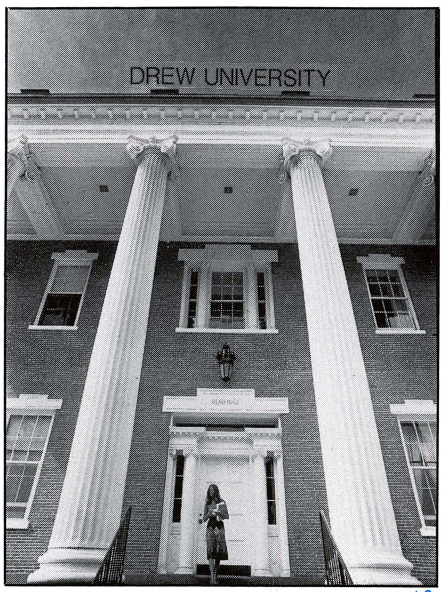

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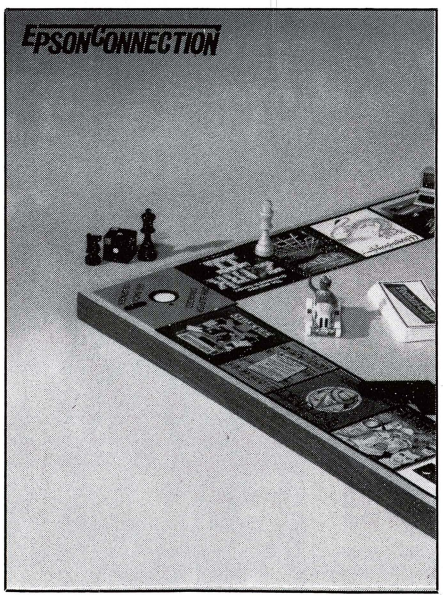

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Editorial

With the holiday seasons approaching we devoted this issue to games and education. The search for quality educational programs was disappointing, and what is available is found for the Apple computer, or is in MS-DOS format. Games are readily available, simulations and adventure games are predominant. The software reviews this month are a representative sampling of the types of game programs on the market and include: role-play fantasy adventure, computerized chess, simulation investment, and computer slueth.

A bonus for programmers is an etch-a-sketch type program by Dan Oja, which provides experience in direct cursor addressing, graphics, and the MBASIC INKEY$ function. This program is on our Disk of the Month (EC-14) along with several games and educational programs.

If you have neglected maintenance of your computer, you should plan to make it a regular part of your cleaning chores. Wipe the screen and outside case with a mild detergent (we find Windex or Ivory Liquid work well), vacuum out your printer and keyboard, a soft brush will help loosen particles, and if you have owned your QX for six months or more, check your fan output. Included this month is a HOW-TO article on opening the QX case and cleaning the fan and screen. This only needs to be done if the air flow is restricted.

Are QX-10 owner's being abandoned? What about the HX-20? Is the QX-16 owner next in line? We have had many contacts from owners who feel they are no longer being supported, and wonder what to do; buy another computer (like an IB...) is frequently the first comment. Finding a reliable dealer is frequently a problem mentioned, and makes those of us with a good one feel lucky. These days virtually every computer is outdated by the time it is released. The new software releases QX owners can use are primarily in MS-DOS and not CP/M. There are very few companies around producing new CP/M software. This certainly does not mean that your QX-10 is poorly supported.

QXPC2 Titan boards have made the QX-10 compatible with MS-DOS, Epson is continuing to add more peripherals while providing upgrade methods for current owners, and there are more Epson computer user groups, newsletters, and BBS systems available than before. The best support will always be from other users who have similar experiences. Users are active resources on bulletin boards, on the Source, on CompuServe, and through their groups and publications. When you have an excellent piece of hardware, why trade off for a more expensive brand name. If you are frustrated with the particular software you are using, ask others what they use, there is certainly enough available software to take care of most anyone's needs. If you are looking for more speed, then consider a RAMdisk or hard disk, both are available. HX-20 owners, we hear your pleas for more support and will add an HX EXchange column beginning next issue.

Next month we will look at peripherals; hard drives, internal boards, the SQ-2000 ink-jet printer, multiplexing systems, internal cards and utilities, a battery backup system, the new CR128K buffer, along with an interesting interview with Jim Bell, President of SemiDisk Systems.

Footnote

Two days prior to the printing of this issue we received the enclosed ad from R.S.I. They are announcing the release of Valdocs + with new features and support. We have not received Valdocs + yet, but plan to review it in the next issue.

I would like to reiterate my position expressed several months ago; that Valdocs owners are entitled to a bug-free version without additional payment. Our evaluation of Valdocs + will weigh this position against the new features and promises. I am concerned, and invite your feed-back.

NEWSNOTES

EPSON BREAKS GROUND

Governor Victor Atiyeh (Oregon) joined Mr. Ichiro Hattori, Epson Corporation Chairman, in a groundbreaking ceremony at the new 100,000-square-foot plant being built near Portland Oregon. The $10 Million dollar assembly plant is expected to be completed in June 1986. They plan to employ 200 people, and assemble about 25,000 printers each month at full production.

The commitment by Epson Japan in Oregon extends beyond this new plant. They are full sponsors of a two year old program which allows American graduate students with degrees in electrical engineering, computer engineering or computer science to travel to and work in Japanese research laboratories for six months to a year. At the groundbreaking Mr. Hattori presented two cash gifts to the Oregon State System of Higher Education and the American Electronics Association's Electronics Education Foundation. The money is earmarked to support electronics training and education programs.

HX-20 HELPS WIN AWARD FOR UNIVERSITY

Southern Methodist University recently won a $10,000 award from the National Association of College and University Business Officers for cost-cutting. Allen Gwinn created a program on the HX-20 known as TickeTrak which has saved the university over $30,000. He started creating the program in his third year at the University, and subsequently left to start his own business, MicroDigital. The program is being marketed for Allen by Cardinal Computers, which specializes in vertical market applications. The system is used by the SMU police, and makes citation books obsolete, reduces paperwork, and improves their data management. The HX-20 is carried by the officers, records parking and traffic violations, prints out a summons that resembles a cash register receipt, and stores the information to tape for direct transfer to a central computer at police headquarters.

VALDOCS 2 FIX DISK

There is a Valdocs 2 fix from Rising Star Industries which is 214K library file. The items changed by the fix are:

- Decrease how often the right drive is accessed.
- Enable the 300 baud Hayes modem to work properly.
- Fix problems with the DefKey (CTRL U) in the spreadsheet.

The file contains documentation which explains how to update your LOAD and RUN-TIME disks with these new files.

This upgrade is available on various bulletin boards as well as our own (Epconn SOCIS BBS), however due to the size of the file we are also making it available on disk. If you wish a copy of this fix, send $10. to : EpsonConnection, V2 Disk Fix, P.O.Box 14027, Detroit MI 48214.

Other files on the disk will include SWAP.VAL (6K) a document and patch to change from 1.19 to 2.0 without going through the setup process, and a patch SETFLAG.SYS (2K) to allow you to bring a spreadsheet into the editor without having to go into Zapple. ■

MBASIC CHALLENGE

by Allen Howell

This is a follow-up on The MBASIC Challenge, (August 1985 EC, pg. 54).

This "one-liner" is a very simple ascending order sorting program submitted to us by Andy Adams of Bloomington, In.

```
1 INPUT "Max";M:DIM A$(M+1):A$(0)="X":WHILE
A$(K)<>"":K=K+1:PRINT "Item ";K;" or
RETURN";:INPUT A$(K):WEND:K=K-1:P=1:WHILE
D=0:D=1: WHILE X<K-P:X=X+1:WHILE
A$(X)>A(X+1):SWAP A$(X),A$(X+1):D=0:WEND
:WEND:X=0:P=P+1:WEND:FOR X=1 TO K:PRINT
A$(X):NEXT X
```

This next one isn't really a one-line program, but more of a subroutine sent to us by Mark Marlow of Somerville, Pa. It converts a string in variable A$ to all upper case characters.

```
10000 B$="":FOR J=1 TO
LEN(A$):A$=ASC(MID$(A$,J,1)):B$=B$+CHR$
(A+((A>96)*32)):NEXT J:A$=B$:RETURN
```

Have you ever needed to add a few numbers together while working on your computer, but couldn't find your calculator? This program will add and subtract numbers and maintain a total at the top of the screen.

```
1 PRINT CHR$(26);:A=1:B=0:WHILE A<>0:INPUT
A:B=B+A:PRINT CHR$(26);:PRINT B:WEND
```

If you have a "one-liner" that is better than these, send it in, and if it does something, well publish it. Send your program to:

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Questions & Answers

Q I am looking for ways to speed up my word processing, and I'm considering two possibilities. Perhaps you can advise which is better. Should I, 1) convert to Valdocs 2 in tandem with a Semidisk, or 2) install a Titan board and run a program like "Xywrite II Plus"?

Either way I go, it will cost about the same, so price is not a determining factor.

Eight bit, sixteen bit, it's all the same to me. I'm just looking for a way to move around inside the files the fastest way possible.

Bernard Switalski
McCook, IL

A *If you have used Valdocs 2 and are satisfied with its performance, then we would have to recommend that you purchase the Semidisk to give Valdocs 2 the speed that you require. We recommend that the Semidisk be used as a data disk only, for that is where most of your disk I/O is going on. To efficiently utilize the RAM disk, set up two macro keys that will automatically transfer the contents of your "B" drive to the RAM disk, and vice-versa when your Valdocs session is finished.*

The Titan board is extremely slow when it comes to disk I/O. This is a drawback, however there are many fine MS-DOS word processing programs like Xywrite and WordPerfect which are worth considering. Our preference is to operate with a hard disk drive or with the SemiDisk.

Q I own an Epson QX-10 computer with Valdocs 2. I would like to buy the "Random House Proofreader" after reading a very favorable review of it in your magazine. Your review indicated that this proofreader works very well with Valdocs 1.18 documents, but will you please let me know whether it will work with documents written with Valdocs 2.0?

Daniel Carnese
Westport, CT

A *Daniel, as of this writing, there are no known spelling proofreaders that will work with a "stock" Valdocs 2.0 document. However, if you store the document you wish to check as an ASCII file (via CTRL-Q, Store as Non-Indexed File), then most any CP/M proofreader should work well. Unfortunately, this procedure is rather cumbersome, but it is the only way to do it at this time. We hear that the creators of VSPELL are working diligently on a version to work within the Valdocs environment. Bill Howey outlined the steps for creating a MACRO with Defkey to spell check documents with VSpell in the August issue (page 36).*

Q How can I get the cents symbol to print on my MX-80 from Valdocs 2?

Les Winick
Homewood, IL

A *You can't. Only the FX, JX, and LQ series printers can print any of the special characters and graphics from VALDOCS.*

Q As appreciative users of the 111K ramdisk (CP/M 2.25), we ask why can't this be expanded to the 168K available in the public domain RAMDRIV 5, which runs under CP/M A?

Another question equally (or perhaps even more) to the point is, why can't some of the QX-10's 256K be made available as a ramdisk in which to load programs and document files from Valdocs? This seems so obvious that our suspicion is that perhaps it would not be simple to do, but knowing this for certain might at least ease the frustration.

Guy Nesom & Michael Otto
Memphis, TN

A *Some very good questions. After getting nowhere with anybody in an official capacity at Epson or RSI, we have learned that with CP/M B, the extra bank is used by CP/M to hold such information as character fonts, system statistics (which can be seen by pressing CTRL-HELP), and part of CP/M itself, which is why you only get 128K for the ram disk instead of 192K (remember, even ramdisk must be formatted, which leaves 111K in a 128K ramdisk).*

When TPM is used, the TPM operating system loads itself to bank one, and leaves banks two and three unused UNTIL Valdocs is loaded. Valdocs loads the GDRIVER, SYSINIT, FONTS, INDX.CHN, and the startup program (whatever you select: EDIT, COPYDISK, SPREADSHEET, DRAW, MENU, etc.) into the two remaining banks.

Q I have a number of disks which give me the message: "Data disk is full. Insert new disk in right drive." No command will override this message. I can't return to the editor, retrieve any file, or do anything. Is my Valdocs 1.19 suggesting that I should discard a disk when it is full?

Richard Wynn
Allison Park, PA

A *Richard, when Valdocs says to insert a new disk, try it, and Valdocs will proceed to transfer the document you were working on onto the new data disk. It is usually fairly simple.*

Q I have an Epson FX-80 printer and a QX-10 that prints everything but Valdocs. It used to print Valdocs also for a year and a half, but one day it stopped and just went to EDIT. It does this with ALL versions of Valdocs. The printer functions with any program used in CP/M. It does the same thing with other QX-10 computers and other copies of Valdocs. It's not the cable either. My local Epson printer dealer won't work on it because he uses IBM or CP/M to test with and it works fine with both. What do you suggest I do?

Charles Allison
Cincinnati, OH

A *Sounds like Valdocs might think your printer device is connected to your serial port instead on the*

Continued on page 9

Letters to the Editor

Missing Valdocs Utility Files?

Dear EC,

In reference to your June / July issue of the EpsonConnection that had the tear-out card with the VALDOCS 2 EDITOR FUNCTIONS on one side and the files list on the reverse. I have finally managed to purchase my QX-10 Valdocs 2 upgrade and have listed out the disk files and find some discrepancies in the two which I find bothersome to say the least.

First of all, my Run disk lists two files which do not appear on your list; they are MAILCARD.LOG (2K) and MAILINDX.LOG (2K). It appears that they have been created and put on the disk by Valdocs in the normal course of events.

Secondly, the Utilities disk does not contain any files not on your list; however, there appear to be a number of files which you have listed which are missing. They are listed as follows:

@.SYS
DMU.SYS
SET-TIME.SYS
ZDDT.SYS
ASC.SYS
DSTAT.SYS
SPOOL.SYS
ZPIP.SYS
BAUDSET.SYS
LIST.SYS
TPMTOOLS.DOC

A number of these files are on a utilities disk which I received from Rising Star a couple of years ago but they may or may not be compatible with TPM-III. The one which I have tried, ASC.SYS does not seem to work with Valdocs 2 files. Which brings up another matter. . .

I understand that now, in order to use our old Peach Spelling Proofreader on a Valdocs 2 document we must first change the document into an ASCII file. Need some help on how to do this, which brings us back to the paragraph above.

Sincerely
Bill Benson

Dear Bill,

On some of the released Valdocs 2 utility disks there were utility files on user area 1. The files which you are looking for are most likely there. To get to them you can use several methods, exit to TPM from the main menu and at the prompt go to the B drive by typing as follows (what you should type is shown in bold, and press the RETURN key when you see <CR>):

*A>**B:** <**CR**>*
*B>**1:** <**CR**>*

Now if you type a U and a <CR> it will tell you what user area you are in like this:

*B>**U** <**CR**>*
User 1

*Then type B>**DIR** <**CR**> to see the directory of files on B1.*

*One alternative you may wish to use is from the editor press **Q** (for <Q>uirks menu, note you will need to be in advanced or expert experience level in the SETUP menu to bring this menu up) and select <L>og in different disk drive and when it asks for the drive type in B1, and you will now have access to the B1 user area and these files from Valdocs. One of the first things I did was to copy all these files from the utility disk user area B1 to another disk in the 0 user area. You can use COPYDISK to do this, and remember to indicate B1 when it asks for the source drive (presuming you have put the Utilities disk in the B drive).*

*To answer your second question, how to change a document into an ASCII file, you again use the <Q>uirks menu (press **CTRL Q**) and select <S>tore as a non-indexed file, and your next menu will give you the option to store it as an <A>SCII file. In our June / July issue (page 6) I suggested anyone planning on storing documents as ASCII files should set their left margin to 0 before creating their text. This will help prevent formatting problems which may occur when you later retrieve the file. Bill Howey wrote an article in the August issue (page 36) The Valdocs 2 Text Editor, which explains how to set up a macro key with V-Spell spelling proofreader (CompuView) to automate storing a document as as ASCII file, run the spelling program on it, and retrieve it back into the editor. You should be able to use DEFKEY (accessed from the editor by pressing CTRL U) to speed up your process. Please do not hesitate to ask your questions, it helps a lot of others who don't have the time, or courage, to follow through.*

-C.M.

SemiDisk and Valdocs 2

Dear Editor:

Like many QX-10 owners, I found Valdocs 1.X slow, but usable. With it I wrote most of a book, innumerable articles, letters and syllabi, waiting for the putative improvements of Valdocs 2, which would solve everything.

Well, while Valdocs 2 has many admirable new features (including an essential in professional writing - page headers), it doesn't solve everything. Cursor speed is increased but so is disk access; at times 2.0 has a rubbery feel as the cursor overshoots the mark, then over compensates on the way back; it's like tap dancing on a trampoline.

Editing a converted chapter, I feared my B disk drive might break down any moment. (It didn't: Epson makes quality stuff.)

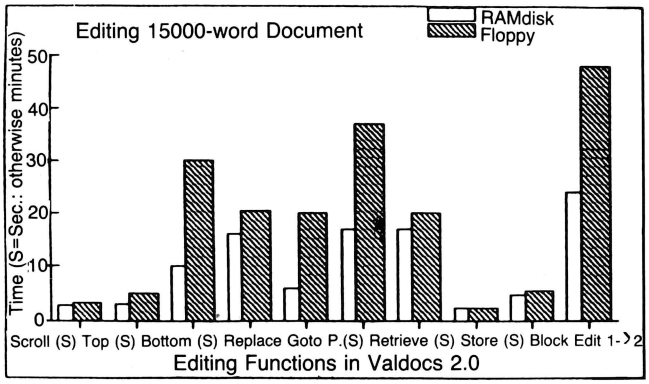
A week later I bought a 512K RAMdisk made by Semidisk.

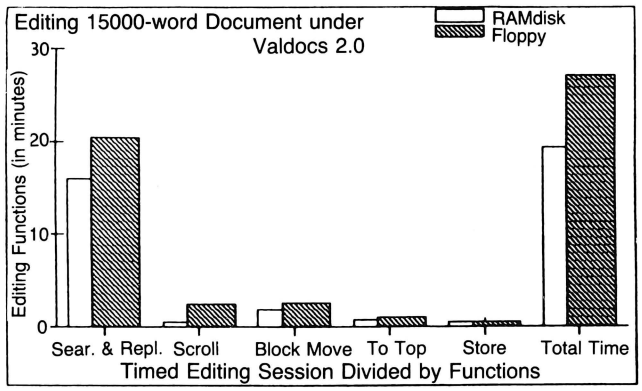
I have compared a number of operations with and without the RAMdisk (see chart.) In general, most editing functions run significantly faster with the RAMdisk, although not as much as I would have thought (block moves, scrolling and storage seem relatively unaffected.) Perhaps the biggest changes are esthetic: silence from drive B, and a crisper cursor response.

Sincerely
Paul Bunning
Lacey, WA

SemiDisk and Valdocs 2 Chart

by P. Bunning





Continued from page 7

parallel port. Load your Valdocs 2, and go immediately to the SETUP program. Change your experience level to EXPERT, then enter the Expert options setup. From there, make sure that you have your printer device set up on the parallel port, not the serial port.

Q What is the fastest word processor available for use on a basic unmodified QX-10 (regardless of the relative difficulty of learning the processing commands)?

A.L.B.
Cambridge, MA

A *Your question is very general, and only a relative answer can be given. With most word processors, some functions are faster in one program than in another. Are you a fast typist and want a program that can keep up with you, or do you want a program that can quickly perform block moves and searches? Most generally, a RAM based editor will be faster than a disk based one, but a RAM based editor using 64K cannot hold as much data as a disk based one. Three popular choices are WordStar, MSCRIPT (see September issue), and NewWord (see the June-July issue).* ■

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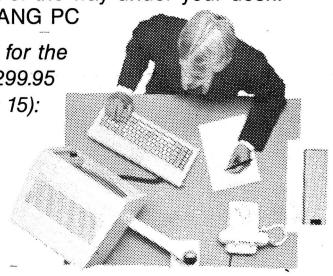

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Disk of the Month EC-14

This month's disk contains the following public domain games and educational programs.

8080EDUC.LBR - This library contains two programs that assist in learning the 8080 assembly language.

CHESS.LBR - This program will play chess with you. The CHESS.COM program is configured for the QX-10, thus, you need not turn on your "7 bit masking" as a former chess game required.

HAUNT.LBR - This is a relatively small, but challenging adventure game in which your only goal is to escape the haunted house alive.

JETSET.LBR - A Jet Simulated Electronic Trainer, or, a flight simulator program. See the article in this issue for more details.

LITQZ.BAS - A literature quiz.

MCHASE.LBR - An excellent graphic maze game where you try to eat the money in the mazes without being devoured by monsters.

SKETCHER.BAS - A relatively simple 'etch-a-sketch' type program.

SPORTS.BAS - A sports quiz.

TDRILL.BAS - Typing drill exercise.

TENNIS.BAS - A tennis quiz.

TRIVIA.LBR - Computer trivia game. The computer knows 400 questions covering several subjects. You play other humans, not the computer.

WG102.LBR - This program generates word search games.

These public domain programs are provided on a quality diskette and the price does include downloading, postage, and handling. **To order the Disk of the Month,** please send a check or money order for $15 to the EpsonConnection, Disk Service Department, P.O. Box 14027, Detroit, MI 48214, Please be sure to indicate the disk order number (EC-14) with your payment.

Disclaimer: All of the programs and documentation on this disk are known to be public domain and no warranties are expressed or implied. There are no guarantees with public domain software. All of the programs have been tested on the Epson QX-10, and are known to run. Public Domain programs are programs written by other users, for public use at little or no charge, other than that for handling, mailing and materials. **Note:** We imply no similarity, or advise any comparison, between public domain software and software that is commercially produced. A beginning knowledge of CP/M is also recommended to utilize this software.

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JETSET

A Public Domain* Flight Simulator

by Allen Howell

From the many outstanding public domain games, such as Adventure and Chess, QX-10/16 owners may now add this piece of software to their list of "quality" games.

JETSET stands for JET Simulator Electronic Trainer. You are the pilot of a Boeing 747, and your goal is to get the jet off the ground, fly it to your destination without getting lost, and then to land the plane without crashing it. As in real life, most of the simulation is done via instrumentation, and not by actual visibility, therefore, graphics are used sparingly within the program, and only during take-offs and landings.

The simulator acknowledges 17 keyboard commands, of which over half are used to control the jet's speed, pitch, and rudder. Other controls are brakes, flaps, landing gear, and VOR radio tune and radial selector.

All flights originate from the Philadelphia airport, and the pilot of the aircraft may choose from among a dozen or more airports to fly to.

After spending more than six hours experimenting with JETSET, I have mastered the takeoff procedures, and am moderately proficient at navigating the jet after it's up.

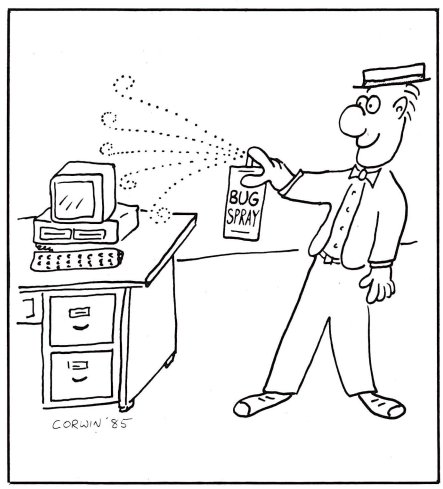
Landing the jet is the most difficult part of the program. As you get closer to the airport the navigation must be more precise, and minute course changes produce drastic results. Since JETSET is a "real-time" program (generally meaning that it takes the same amount of time on the computer as it would in real life), it takes about 20 minutes to get the jet airborn and on course, then you're usually ready to shoot a landing. If you abort a landing it should take about 15 minutes to get your bearings and attempt another landing or find another airport. One tends to be more successful taking off than landing the jet.

If you are looking for a high-speed, action packed public domain game to play, then this is NOT for you. JETSET takes a lot of time and patience. It's not something you learn to use in 20 minutes. The documentation provided with this version is sufficient to get you up in the air, and it provides some step-by-step instructions on how to take off, fly, and land, however it leaves much to be desired. If you have some previous knowledge of flying, and understand how planes use radio signals to navigate, then you will feel right at home with JETSET. The documentation claims that the program follows all government rules and regulations, and that JETSET is very similar to "real-life" flight simulators, thus it may well be considered educational as well as entertaining. ■

*Public Domain programs are programs written by other users, for public use at little or no charge, other than that for handling, mailing and materials.

JETSET is included on this month's Disk-of-the-Month (EC-14). If you have a modem, JETSET may also be downloaded from the EpConn SOCIS (313) 823-1425.

JETSET was originally published in the Nov. 1982 issue of BYTE magazine, and was originally written for a Radio Shack TRS-80 Model II.



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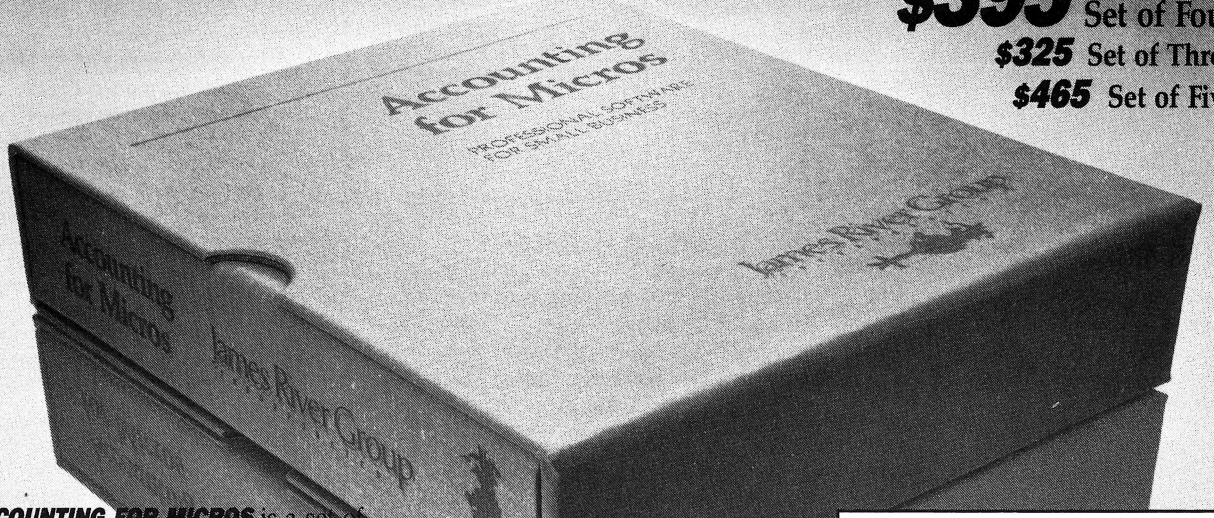

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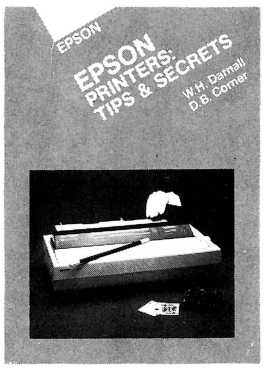
Epson Printers:

TIPS & SECRETS

by Carolyn McCarthy



by W.H. Darnall and D. B. Corner
Published by Merdyne Publishers, Inc.
Copyright 1985 Price $19.95

The title of this book sets the stage. It is filled with tips for Epson printer owners. The general areas dealt with are: Understanding how a character is printed, basics and details of interfacing the printer, sending control codes to the printer to control the printout, bit image graphics on your Epson and making use of user defined characters, tips for getting the most for your printer from popular word processing programs, printing from popular programming languages, special applications, and a unique section on symptoms causes and remedies.

Do you use a vacuum cleaner to blow out the dust? Has a friend told you they use alcohol to clean the print head? Were you able to say, 'No, the alcohol or solvent may leach the lubricating ink from the pin channels and cause a printer jam.' Have you thought about printing bar codes with your printer? There are tips for getting quality print when you use spirit duplicator masters.

The printers discussed in their examples include the MX, RX, FX, and LQ series printers. This is an excellent resource book for those who are just getting to know their printer and want to learn more without getting bogged down in technical jargon.

This is one in a series of books released by Epson America. It is available through Epson dealers and in computer oriented book stores. ■

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Continued on page 50

The Users

Sub & Superscript With the RX-80

Many of us purchased QX-10 computers bundled with an RX-80 printer. At Epson Interact '85 we were told that, because the RX-80 could not download character sets, the RX-80 could not print subscripts and superscripts from Valdocs 2. I was very discouraged to hear that. While the software would do it, my hardware wouldn't print it. However, Dan O'Brien, Manager, Technical Services of Epson Midwest, said that there might be a way to get the RX-80 to print sub and superscripts. I contacted Dan after Interact, and here's the procedure he gave me.

1. Leaving the printer "Off" and the right drive empty, put the Load-time disk into the Left drive.
2. Turn on the computer, and after the "Copydisk" program is loaded, select "<C>opy a disk" and make a copy of the Load-time disk.
3. When finished, select "<R>eturn to top menu".
4. Remove the original disk from the left drive, and replace it with the copy.
5. Select "<F>ile copy, delete, rename", type A for the source drive, select "<D>elete file" and delete the file "FX80.STL".
6. Put a data disk in the right drive, turn on the printer and then either press Reset or turn the computer off and on to re- load Valdocs.
7. When MENU appears, select "<S>etup system", select "<P>rinter characteristics", and choose FX-80. Follow the prompts to continue loading Valdocs.

I've tried it, and this procedure does allow the RX-80 to print both superscripts and subscripts from Valdocs 2. If the printer is on when you boot the system, you get the message "Missing printer graphics file FX80.STL", and it rings the printer bell with a sickly sounding beep. Once, I don't know why, the system "hung-up" after giving me this message, and stopped loading. I hit Reset, and it loaded just fine after that.

Ed Acheson
Decatur, IL

"Screen Dump Your V2 Menus"

It is a good idea to "screen dump" your various SETUP panels for V2 and mark your settings. Several of us have found this useful when we have to reinitialize V2 after going to V1 for some reason. Another useful exercise is to screen dump the USER IDENTIFICATION panel in the (MISCELLANEOUS) section of MAIL. You will need this when you start a new data disk that is not a copy of an existing disk. The DEFKEY panel you get when setting this utility up is also a good one to screen dump.

Another thought -screen dump each of your HELP panels for every module, i.e., EDITOR, SPREADSHEET, CARDFILE, etc,. This does two things for you. It makes an excellent study help guide and second you can erase the files off your data disks and save over 140K for other things. (The HELP files can't be printed out as a continuous file).

Contributed by George Kent. (Bay Area Epson Salts Newsletter, July 1985: 12 Crater Lake Way, Pacifica, CA 94044).

Exiting the Spreadsheet from Valdocs 2

From Valdocs 2, I tried exiting the Spreadsheet via HELP, STOP, UNDO, and got nowhere. Things like COPYDISK and MENU will get you out, but those aren't logical. Here's Epson's way out of the spreadsheet: press and hold the CTRL key while pressing the WORD key.

"Trouble Shooting and Hints" by John Cameaux. (Houston Hi Society Newsletter, July 1985. John Cameaux Editor: QX-10 Users Society, P.O. Box 37049, Houston, TX 77237).

Hidden Function in Valdocs 2

For those of you who have not yet found it, here is one of several "hidden" functions in Valdocs 2. Press and hold the GRAPH SHIFT key while pressing the HELP key brings up a keyboard overlay display to point out which graphic characters are under which keys (shifted and un-shifted).

"Helpful Hints" by Bob Fitzhugh. (Houston Hi Society Newsletter, July 1985. John Cameaux Editor: QX-10 Users Society, P.O. Box 37049, Houston, TX 77237).

Searching for Text in Converted 1.xx Files

There are some limitations with converted Valdocs 1.xx files, specifically the inability to search for text in the converted files. Since then, two procedures have surfaced that get around this problem. The first is to use the Look-for (CTRL-L) menu on your converted file and to hit the right and left DELETE keys until a bell rings after <L>ooking For Text. Hit UNDO and you will be back in the Look-for menu AND the search features will now work. I do not know why this procedure works. The second procedure is to 'strip' your Valdocs 1.xx files with DEVAL.SYS or ASC.SYS and then to <R>etrieve them as non-indexed files under Valdocs 2. All search features will now work but be sure to STORE the files as Valdocs files when you are done.

"Valdocs 2 News and Tips" by Bill Stoebig. (Emerald ePson Users Group Newsletter, July 1985. Darren Hunt, Editor: EPUG, 2775 Cheryl, Eugene, OR 97401).

Valdraw / Valpaint SETUP Tip

Valdraw/Valpaint users must SETUP the communications in Valdocs 2 to a Hayes modem, 1200 baud rate, even if you have a COMREX CR-103 modem (300 baud), otherwise your mouse will not function. To solve the problem of going back and forth in SETUP, you may utilize your new application program called DEFKEY.SYS to define two keys to take care of the key strokes, one setup to run Valdraw / Valpaint and the other to run your communications programs.

Contributed by Finger Lakes Epson Users Group. (Epson Tips Newsletter, June 1985. Francis Lin, Editor: FLEPUG, Box 832, Bath, NY 14810).

Restart Valdocs 2 From TPM III

To restart Valdocs 2 from TPM III, you type RESTART followed by the TPM name of the module you want (e.g., RESTART SPRD to restart the spreadsheet module).

"EPCOT Valdocs News" from the Epson Club of Toronto. (Eps'n Link Newsletter, July 1985. Murray Soupcoff, Editor: EPCOT, 3 McNicoll Ave., Willowdale, Ontario, Canada M2H 2A6). ■

QUICK ACTION CARDS

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issue of the EpsonConnection.

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- ☐ Please have your nearest dealer contact me.

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Suggested Action by RSI and Epson Systems Support Group

Valdocs 2 Error Messages

The following list of Valdocs 2 Editor error messages was developed by RSI and Epson Systems Support. In most cases, no action should be required on your part.

Error message	Action
Can't find line delimiter	Self-correcting *
Can not print this document	See Note 1
Disk buffer damaged	Self-correcting
EDIT.OVL on the system drive is bad	Reboot the system
Empty block detected	**
Error #77	Self-correcting
File not VIRTUAL	Contact RSI
File too large Note: after message, divide file using block store.	Self-correcting
Improper system stack depth	Self-correcting
Invalid block marked	Unmark the block and try again
Invalid line size	Self-correcting
Invalid special control	Self-correcting
Missing embedded sequence	Self-correcting
No remove block function	Self-correcting
Not enough disk space for conversion	See Note 2
Retrieved document is not the proper format to merge	See Note 3
Stack overflow possible	Self-correcting
State-stack error	Self-correcting
State-stack overflow	Self-correcting

* The term self-correcting is used to indicate that you should clear the error message as described in the interaction window by ether repeating the operation or possibly rebooting the system.

Note 1 - If you try to retrieve a 1.X Valdocs document to the 2.0 editor and get this message, there is something on the editor's screen. You must exit back to the editor, and clear the screen (CTRL-M <E> <T> sequence), or STORE the document. Then proceed with the retrieve previously attempted.

Note 2 - If you try the 1.X index conversion using IUTIL and see this message, it means there is not enough space on the data disk to hold the new index. You will need to delete some of the files before you continue. Note that the conversion process results with files which are larger than they were in the Version 1 format. Use Valdocs 1.X to delete some of the indexed files on the 1.X data disk, or index copy the files you want to convert to a new disk and proceed. Load V 2 and use COPYDISK <F>ile copy to copy them to a 2.0 formatted disk, and retry the conversion process.

Note 3 - If you try to print out a 1.X Valdocs document prior to converting it to the 2.0 format, this will be the message. You must RETRIEVE the file and do the ValUTIL conversion before printing it in the 2.0 format. If the error conditions are not self-correcting, try the following procedures:

1. Press the MENU key, choose the <E>xit to TPM selection. At the A> type "B:" <RETURN> then type "REN BADFILE.VAL=EDITCUR0.VAL" and press <RETURN>. This will rename the "problem" file. Now type "RESTART" <RETURN> to reboot Valdocs and go into the EDITOR.< At the blank editor screen, press <RETURN> 10 times, and then use the up-arrow key to move the cursor back up to the fifth line.

   Type CTRL-Q to access the quirks menu and select <R>etrieve non-indexed file (Note: You have selected advanced or expert experience level in the SETUP menu). Enter the filename "BADFILE.VAL". This will bring the file back into the editor.
2. If you are moving the cursor thru the document and notice the error towards the end of the document, go into the CTRL-M menu and choose <D>elete to the end of document. This will delete the "bad" section. You can now retype the information.

   Sometimes it is possible to press the UNDO key and bring back the section you have deleted.
3. If you encounter an error message every time you reboot Valdocs 2, it may be necessary to take drastic measures. Boot the system and press MENU. Choose the <E>xit to TPM option. At the A> type "B:" <RETURN>, now type "ERA EDIT*.*" <RETURN>. This will delete the current document and clear the problem from the system. ■

Rx FOR YOUR Qx

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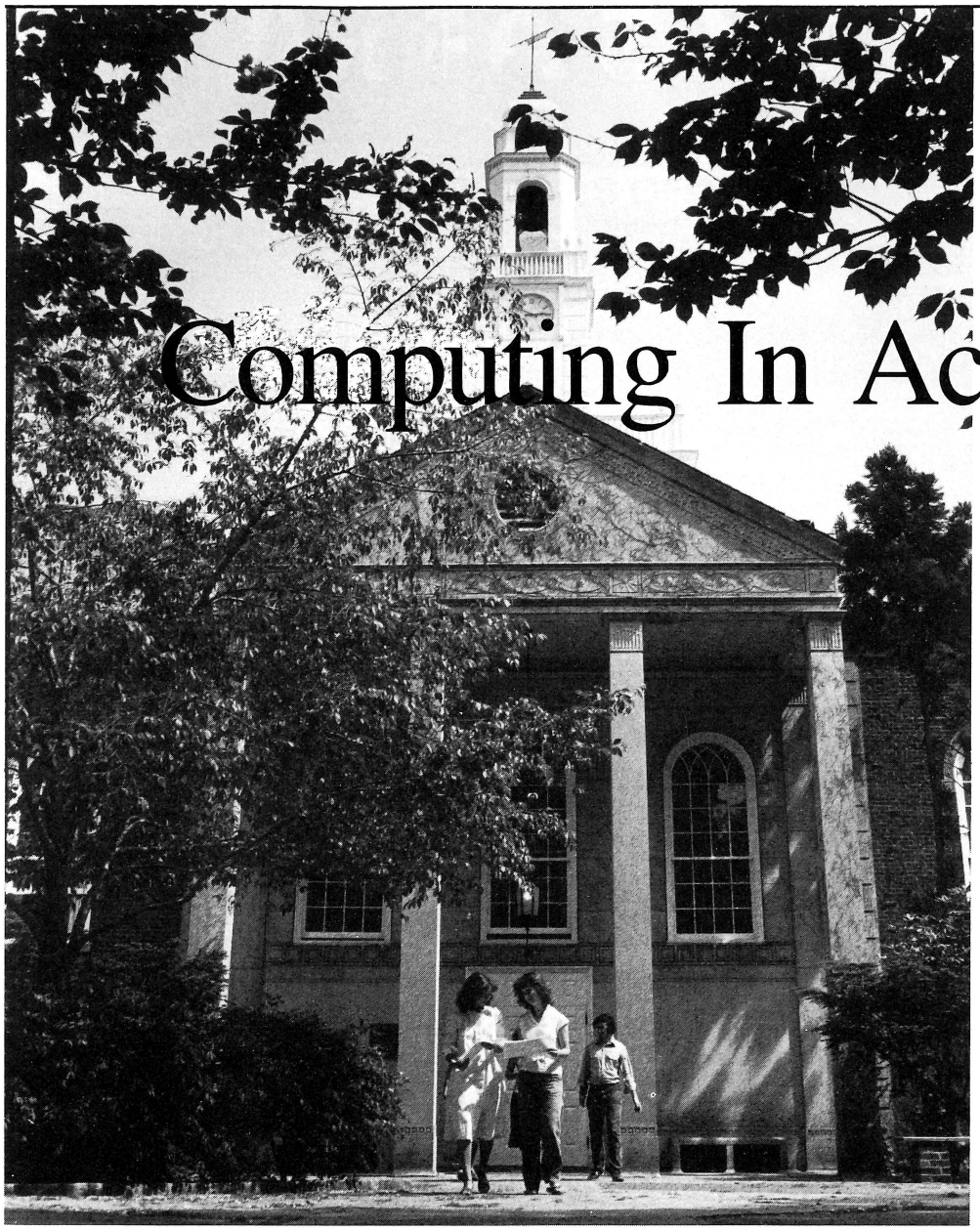

Computing In Academia

by Franc La Clair

School is back in session with the last vestiges of summer reminding us how long it has been since we last "hit the books". Drew University is a small, highly regarded, liberal arts college located thirty miles west of New York City, on 200 forested acres in Madison, New Jersey. Drew University began with 12 freshman students in 1928, growing out of Drew (Methodist) Theological Seminary founded in 1866 by financier Daniel Drew. It is now one of only three colleges and universities in New Jersey with Phi Beta Kappa ranking. The university accepts approximately 300-400 freshman each year to study political science, economics, psychology, and engineering/computer science. The freshman and sophomore students, approximately 740, have the unique experience of having Epson QX-10 computers in their dormitory rooms.

Approximately three years ago, the academic and administrative faculty at Drew formed a consortium to look at the feasibility of introducing computers as tools to aid in the process of education, as a resource to "secondary education" on their campus. Rick Detwiller, Ph.D., Director of Computer Initiatives and Policy and Planning headed the consortium, and continues to provide direction for the program. Dr. Detwiller states, "We were looking for a solid company with a good reputation to provide computers that combined ease of use and compatibility with CP/M and MS-DOS." The major computer companies were considered, with Epson getting the final nod.

"We got the computers we wanted," states Dr. Detwiller, noting that after-the-sale support has been excellent from Epson East (the distributor in Connecticut), the local Epson dealer, and Epson America in Torrance, California.

The entire 1984-85 freshman class was supplied an Epson QX-10 with Valdocs and PeachText 5000. Computers were also supplied to the faculty and most of the support and administrative staff, about 900 total. Epson RX-80 printers were distributed to every dorm room. Many of the 200 or so graduate students took advantage of special pricing and bought Epson systems during the first year of the offer. The 1985-86 academic year will bring an additional 400 QX-16's on campus to the freshman class.

The wide introduction of microcomputers at the University, and the capability of the Valdocs "COPYDISK" function, required Drew University administrators to amend the policy on "academic honesty" to

deal with electronic media. The norm established was that students write papers using VALDOCS.

What are the students and faculty doing with these systems, and, is the goal of the Computer Initiative Consortium of helping students become at ease with using computers as tools being realized? For the answers to these questions we went directly to "end-users."

Mr. Peter Gregg of the Media resource Center and student assistants produced four video tape programs (available in either VHS or BETA format) to orient students and faculty to the QX-10 and printers. These tapes take the first time user through the steps of "Unpacking and Assembling", "Booting", "Diskettes", and "What Can Go Wrong". The responses from faculty and students is that the videos, while not the quality of MTV, are useful, informative, and are well done. The check-out activity of these tapes at the Media Resource Center has been quite good, especially at the beginning of the school year.

Other faculty and staff have put the machines to work in a variety of applications. One staff member, Ray Frey of the Audio-Visual Center in the campus Library has put PeachTree Mail List Manager to work tracking all 420,000 books, 1720 periodicals, and 69,000 microfilms located in the Library and A-V Center. The Center staff enters all the information on Mail List Manager and then print cards for the card catalogue, and resource lists for students for all courses offered. The resource lists can be sorted by title, course number, professor, or course name. Labels and cards are printed on a Comrex CR II, and the resource lists are printed on an FX-80.

The Library is part of the On-Line College Library Computer network which accesses a Lockheed Datrix Computer. Much of the information accessed via the network may be made available to students and faculty on disk or via remote "smart terminal" computer workstations in the future.

Mr. Frey emphasizes that use of the QX-10 has reduced the typing and re-typing load for the staff by "at least one third." He has also produced a reference manual for students and faculty to supplement documentation supplied with the software. Other applications churned out of the Library and A-V Center are lists of resident and non-resident "borrowers" which are updated each semester. The lists have been useful in producing mailings for special Library announcements and fundraising activities.

Mr. Frey notes that "students check out keyboards at the A-V Center to use with one of the six QX-10s located in the Center. They are used heavily at the end of each semester by the students. At least one computer at the A-V Center is in use every day it is open.

The Library, Audio-Visual Center, and Media Resource Center are not the only areas the computers have found wide use and acceptance. Two Epson QX-10s are located within the Graduate School, and 150 are assigned to the Computer Center. Imagine 150 Epson QX-10s humming quietly away at the Academic Computer Center, and the Batch and Interactive Computer Center.

Drew University is also part of the New Jersey Educational Computing Network, using the school's two Vax 750 mainframe computers to access the Network's IBM 370 mainframe. The QX-10's are also able to tap into the Vax 750s via modem, making a tremendously powerful system available to students and faculty for research and simulations. The QX computers are also used by the students and faculty in the Hall of Sciences which houses the Research Institute for Scientists Emeritus, and

QX On Campus

by Franc La Clair

Drew University is not the only college or university utilizing the power and simplicity of the Epson/VALDOCS system. Among the more prestigious is Northwestern University's Medill School of Journalism in Evanston, Illinois. Since 1921 Medill has been one of the premiere journalism schools in the country.

Admitting only 200 students for graduate work each year in either Broadcast Journalism or Reporting and Writing, the demand is high for an easy to learn and use word processing system, which the Epson QX-10/16 with VALDOCS provides.

Attaching a modem to the computer's powerful and easy-to-use telecommunications function, provides students with access to the many on-line databases and wireservices, as well as the mainframe computer at the Chicago Tribune where some students do an internship at the Gannett Urban Journalism Center, under the Newspaper Study Project.

Students at the oldest Catholic college in the United States (founded in 1808), St. Mary's College in Emmitsburg, Maryland (close to Washington, D.C. and Baltimore, MD), have formed a close and sophisticated user's group. With the assistance of Gene Carter, manager of the University Bookstore and SYSOP of the local bulletin board, area users and students are in touch with the latest in tips and public domain software that will enhance their use of primarily Epson computers, academic pursuits, and writing program applications.

Currently over 80 colleges and universities are supplying computers or providing large discounts on computers and peripherals to students and faculty. The obvious advantages of computerizing in academia is producing a significant positive effect on students entering "the real world" where familiarity with micro and mainframe computers are becoming "de rigueur."

Epson is a part of this effort, and hopefully will continue to be. The move is on! ■

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the Computer Science and Laser-Holography labs.

With over 81% of the students living on campus, the computers in the dorms and other campus locations get quite a workout. Although the primary applications for the computers are word processing and some database management, both faculty and students have found some interesting new applications for the machines to aid in the process of education. In the foreign language department, the faculty developed a Greek character set of fonts using the Matrix program. This greatly simplifies the process of writing papers and exams in Greek and in teaching the language. Character sets are being developed for other languages, and foreign language students are using the French and Spanish versions of Valdocs.

Jim Mills, Ph.D. (Columbia 1968) a psychology professor at the University has used the QX-10 and the power of Microsoft Basic to write a unique application for his students. Dr. Mills, with assistance of student programmers and Computer Center, wrote an application that tests the reasoning ability of his students in Abnormal Psychology. The program gives a case history of a patient that is detained on an Emergency Detention in a mental health facility, is later committed to a long term treatment facility, and given treatment without his permission. Students are then asked questions regarding the need for emergency detention based on the patient's behavior, current State legislation, and other questions pertaining to the case. Responses are typed into the computer and saved to disk before leaving the program. The program is helpful in determining content areas for further discussion and focusing awareness on legislation protecting the rights of patients and the community. This is only one of many new applications in the academic setting. Dr. Mills listed other applications occurring on campus in his article "Computer Initiative at Drew University" (Rising Star Newsletter July 85). Applications such as : The Chemistry Department's "design-a-drug" program, the Zoology Department's program to trace blood circulation, the Botany Department's Unit Conversion program, and development of a statistical package by the students in social science courses.

The University is also interested in encouraging student and faculty efforts in developing applications for this new "tool", by sponsoring contests. Although not a dramatic winner in the contest held this last Spring, one student worked around the school's policy of "no pets" in the dormitories with his QX-10, by writing a program that produced a "fish" that "swam" across the screen.

Dr. Detwiller indicates that the area of growth in microcomputers on campus is in the area of "E-Mail" (electronic mail), and local area networks. The purchase of modems among students and faculty is on the rise and will increase during the coming months as the "campus network" takes shape. Greater use of the mainframes by both faculty and students via modem, as well as intra-campus telecommunications is an exciting prospect.

Many of us have learned through experience, the effort involved in accomplishing our daily work has become easier, though at times frustrating, with the friendly VALDOCS user interface and the QX-10/16. So too has the process of education become easier to students and faculty at Drew University. While "hitting the books" and the learning process hasn't changed, the tedious drudgery of writing and revising term papers, reports, and simulations has changed significantly with the introduction of microcomputers at Drew University. ■

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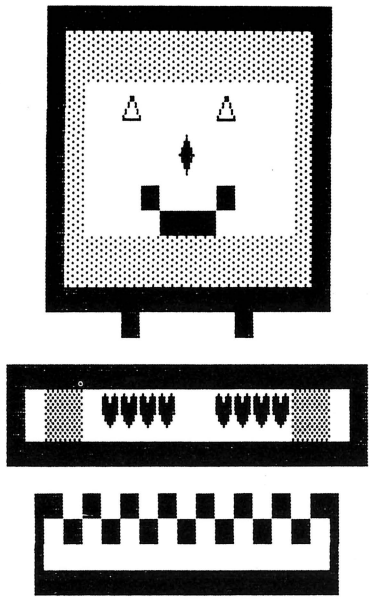
SKETCHER

by Dan Oja



This is a relatively simple 'etch-a-sketch' type program written in Microsoft Basic. "SKETCHER" can be both fun for young children and useful for adults as an example of cursor control and the use of character graphics on the QX-10.

One feature of the SKETCHER program is the ability to screen dump the drawing to a dot matrix printer. The SKETCHER program works well under TPM or CP/M B release.

To use it in Valdocs/TPM mode you should be setup as Valdocs Standard in the SETUP menu for Terminal type. When using it in TPM you will find a few differences in the printout when selecting Bit-mapped mode versus Character-mode (selected through SETUP Terminal Characteristics). In character mode, it actually uses the character set in the printer, whereas in bit-mapped mode it will print out a screen dump from the screen, for example, graphic "hearts" would appear slightly elongated.

CTRL-PRINT will produce a print-out in either system. When using CP/M B you should run the program SETSD first. The first option available is PRINTER MODE FOR SCREEN DUMP. You should select GRAPHICS mode, and then run the program. ■

```
99 REM ***** SKETCHER PROGRAM FOR THE EPSON QX-10*
****
100 REM CREATED AND PLACED IN THE PUBLIC DOMAIN BY
 DAN OJA 9/30/83
101 REM CSR = THE ASCII CODE OF THE SHAPE TO BE DR
AWN
102 REM COL = THE COLUMN IN WHICH YOU WISH TO PLAC
E THE  CURSOR
103 REM ROW = THE ROW IN WHICH YOU WISH TO PLACE T
HE CURSOR
110 GOSUB 2000:REM TITLE SCREEN
115 GOSUB 2100:REM DRAW BORDER
120 GOSUB 1900:REM INITIALIZE
200 GOSUB 1600:REM CHECK KEYBOARD
250 GOSUB 1300:REM CHECK BOUNDARIES
300 GOSUB 1500:REM MOVE CURSOR
400 GOSUB 1400:REM DRAW AT SYMBOL
999 GOTO 200
1300 REM CHECK BOUNDARIES
1310 IF COL<2 THEN COL=2
1320 IF COL>65 THEN COL=65
1330 IF ROW<2 THEN ROW=2
1340 IF ROW>22 THEN ROW=22
1399 RETURN
1400 REM DRAW AT CURSOR
1410 PRINT CHR$(CSR)
1499 RETURN
1500 REM POSTION THE CURSOR AT THE DESIRED LOCATIO
N
```

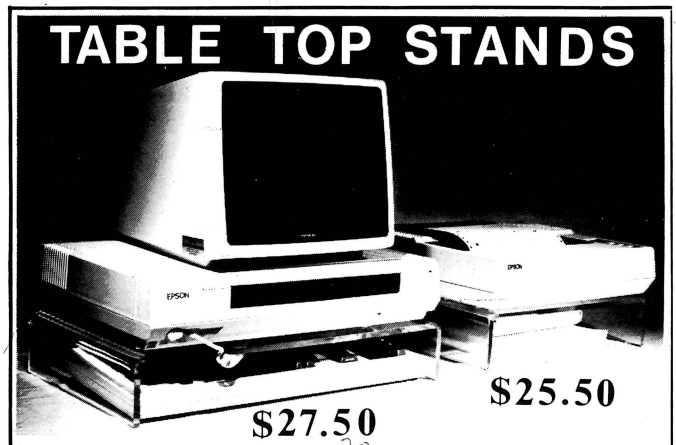
NEW RELEASE: Dan Oja recently completed an Early Learner's Toolkit which is being marketed through the IPG (Independent Programmers' Guild) of Rising Star Industries. The program is self-booting, and runs in TPM III. There are 9 different modules which are selected via arrow keys from an opening menu. These are: Name Game, Number Matching, Letter Matching,, Counting, Adding, Telling Time, Piano Man, Sketcher, and Murkle Mazes. The first five have animated nursery rhyme reward sequences for those achieving three stars (completion of three sets of 5 answers each.) The program integrates graphics and music. This is the first IPG release. We understand his next IPG product is **Early Reader**. Congratulations Dan!

To order the program: Rising Star Industries
Attn: Sales Dept.
25500 Hawthorne Blvd.
Torrance, CA 90505
(213) 373-9112

Cost: $34.95

Note: The CP/M version of Sketcher is available on this month's Disk of the Month.

```
1510 PRINT CHR$(27) CHR$(61) CHR$(31+ROW) CHR$(31+
COL);
1520 REM THIS METHOD OF POSITIONING TH CURSOR IS P
RESENTED IN "USING CP/M WITH THE EPSON QX-10 -PREL
IMINARY", PAGE 27 (LOAD CURSOR)
1599 RETURN
1600 REM CHECK KEYBOARD
1610 A$=INKEY$
1620 IF A$="7" THEN COL=COL-1:ROW=ROW-1
1630 IF A$="8" THEN ROW=ROW-1
1640 IF A$="9" THEN COL=COL+1:ROW=ROW-1
1650 IF A$="4" THEN COL=COL-1
1660 IF A$="6" THEN COL=COL+1
1670 IF A$="1" THEN COL=COL-1:ROW=ROW+1
1680 IF A$="2" THEN ROW=ROW+1
1690 IF A$="3" THEN ROW=ROW+1:COL=COL+1
1700 IF A$="m" THEN CSR=30:REM MOVE WITHOUT CHANGI
NG SCREEN
1720 IF A$="e" THEN CSR=32:REM PRINT SPACES TO ERA
SE SCREEN AS YOU MOVE
1730 IF A$="c" THEN PRINT CHR$(26):GOTO 115:REM CL
EAR SCREEN AND RESTART
1735 REM THE NEXT SET OF LINES DESIGNATE THE SHAPE
S TO BE USED FOR DRAWING
1740 IF A$="t" THEN CSR=169
1745 IF A$="u" THEN CSR=242
1750 IF A$="s" THEN CSR=240
1755 IF A$="l" THEN CSR=227
1760 IF A$="d" THEN CSR=173
1765 IF A$="p" THEN CSR=226
1770 IF A$="r" THEN CSR=243
1775 IF A$="f" THEN CSR=225
1780 IF A$="h" THEN CSR=172
1790 IF A$="j" THEN CSR=241
```

These custom stands for the QX-10 and Epson printers are made of heavy gauge 3/8 inch clear aclylic with polished edges and non-skid feet. The QX-10's keyboard slides underneath when not in use to protect it and free desk space for other uses. Inserting disks is easier and screen is raised to a better viewing height. Sturdy printer stand provides front or rear access to paper and requires no extra desk space. Available for 80 or 100 series printers (add $3.00 for larger model). Order by mail or phone and pay by check, M.O. or C.O.D. Same day shipment and 20 day return policy. Please add $3.00 per unit for shipping and $1.65 for COD's. MD residents add 5% sales tax. Dealer inquiries invited.

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(301) 292-5995


```
1795 IF A$=CHR$(27) THEN GOTO 2500:REM END PROGRAM
1799 RETURN
1900 REM INITIALIZE VALUES FOR SCREEN DISPLAY
1910 CSR=240
1920 COL=32
1999 RETURN
2000 REM SCREEN TITLE
2010 PRINT CHR$(26)
2020 COL=12:ROW=5:GOSUB 1500
2030 PRINT "***** SKETCHING PROGRAM FOR THE EPSON
QX-10 *****"
2040 COL=17:ROW=10:GOSUB 1500
2060 COL=23:ROW=13:GOSUB 1500
2070 PRINT "PRESS ANY KEY TO START..."
2075 COL=2:ROW=23:GOSUB 1500
2080 A$=INKEY$
2090 IF A$="" THEN GOTO 2080
2095 PRINT CHR$(26)
2099 RETURN
2100 REM DRAW BORDERS
2103 COL=0:ROW=0
2104 PRINT CHR$(26)
2105 CSR=240
2110 FOR ROW=1 TO 23
2120 GOSUB 1500:GOSUB 1400
2130 NEXT ROW
2140 FOR COL=1 TO 65
2145 ROW=23
2150 GOSUB 1500:GOSUB 1400
2160 NEXT COL
2170 FOR ROW=1 TO 23
2180 GOSUB 1500:GOSUB 1400
2190 NEXT ROW
2200 FOR COL=1 TO 65
2205 ROW=1
2210 GOSUB 1500:GOSUB 1400
2220 NEXT COL
2290 GOSUB 2300:REM DIRECTIONS AT EDGE OF SCREEN
2299 RETURN
2300 REM PRINT DIRECTIONS
2310 ROW=0:COL=69:GOSUB 1500:PRINT "* SKETCHER *"
2312 ROW=2:COL=69:GOSUB 1500:FOR N=1 TO 12:PRINT C
HR$(248);:NEXT N
2315 ROW=4:GOSUB 1500:PRINT "<ESC> TO END"
2320 ROW=5:GOSUB 1500:PRINT "<E>RASE"
2325 ROW=6:GOSUB 1500:PRINT "<M>OVE"
2330 ROW=7:GOSUB 1500:PRINT "<C>LEAR"
2340 ROW=9:COL=69:GOSUB 1500:PRINT CHR$(172)" h"
2345 COL=74:GOSUB 1500:PRINT CHR$(226)" p"
2350 ROW=10:COL=69:GOSUB 1500:PRINT CHR$(240)" s"
2355 COL=74:GOSUB 1500:PRINT CHR$(242)" u"
2360 ROW=11:COL=69:GOSUB 1500:PRINT CHR$(169)" t"
2365 COL=74:GOSUB 1500:PRINT CHR$(225)" f"
2370 ROW=12:COL=69:GOSUB 1500:PRINT CHR$(243)" r"
2375 COL=74:GOSUB 1500:PRINT CHR$(227)" l"
2380 ROW=13:COL=69:GOSUB 1500:PRINT CHR$(173)" d"
2385 COL=74:GOSUB 1500:PRINT CHR$(241)" j"
2389 COL=69
2390 ROW=15:GOSUB 1500:PRINT "MOVE CURSOR"
2400 ROW=16:GOSUB 1500:PRINT "WITH NUMBERS"
2410 ROW=17:GOSUB 1500:PRINT "ON KEYPAD."
2420 ROW=19:COL=73:GOSUB 1500:PRINT CHR$(202)
2425 ROW=20:COL=71:GOSUB 1500:PRINT "7 8 9"
2430 ROW=21:COL=69:GOSUB 1500:PRINT CHR$(200)" 4 5
 6 "CHR$(201)
2440 ROW=22:COL=71:GOSUB 1500:PRINT "1 2 3"
2450 ROW=23:COL=73:GOSUB 1500:PRINT CHR$(203)
2499 RETURN
2500 REM END PROGRAM AND CLEAR SCREEN
2510 PRINT CHR$(26)
2520 END
```

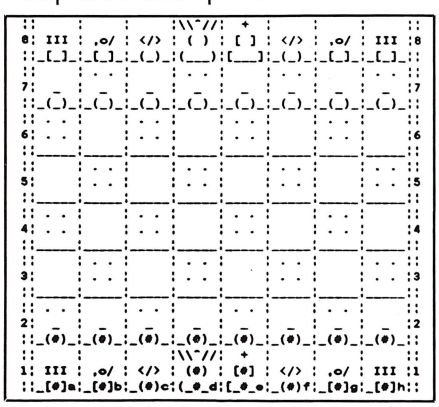
MycHess

by Bob Hermann

SPEC SPOT

Product: MYCHESS, Version 2.3
Type: Entertainment
Computer: QX-10, QX-16
Operating System: CP/M 2.2X B
Required Peripherals: Optional use of printer
Price: $34.95
Ease of Use: Excellent
Documentation: Adequate
Summary: Superb graphics, player options and unique search strategy make this both a good chess opponent as well as instructor.
Manufacturer:
Software Toolworks
15233 Ventura Boulevard
Suite 1118
Sherman Oaks, CA 91403

The MYCHESS disc contains two chess programs -- MYCHESS.COM and MYCHESSN.COM, along with the configuration program MYCONFIG.COM. The basic difference between the MYCHESS.COM and MYCHESSN.COM is in the way in which the chess characters are displayed on the chess board. The MYCHESS.COM version runs only on the CP/M B version, and displays an excellent graphic representation of sculptured chess pieces. The



MYCHESSN.COM

MYCHESSN.COM version does not support the graphic characters and displays the pieces symbolically, with punctuation characters.

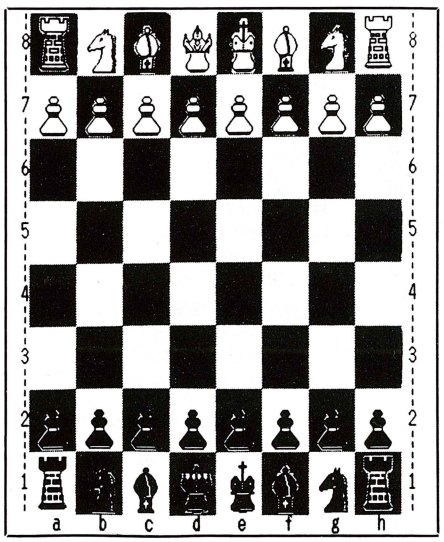
The chess program algorithm itself will search all possible moves, while eliminating illogical ones from the search process. The search strategy uses killer and capture heuristics which result in a more aggressive opponent than most other computerized chess games. It combines brute force logical moves with most standard openings; King's Gambit Declined, Ruy Lopez, French Defence, Giuoco Piano, Queen's Gambit, Bishops's Gambit, Sicilian Defense, the Max Lange Attack, the Polish Opening, and the Queen's Indian Defence. After playing a few games with this program you will note that it actually uses most of these tactical openings for its own benefit against you.

The program offers its opponent a variety of set-up options:

1. Set up a position ? - A yes answer to this option will cause the program to display the game board set up for the beginning of a game. You can then move pieces to the desired locations, or delete pieces as necessary, and start the game from there.
2. Record moves on printer ? - This allows the player to record the moves as made on a printer.
3. What is your name ? - Records your name versus MYCHESS.
4. Time controls ? - This imposes a time limit on a certain number of moves. The game does not keep track of the time. When playing a timed game the program will prompt you periodically for the amount of time remaining.
5. Skill level (half moves to look ahead) (1-9) ? - The higher the number you enter, the better the foresight of the program. Each level will increase response time sixfold over the preceding one, with level one having a response time of about 30 seconds. You may not use this option when time controls are in effect.
6. Display the best variation ? - This causes the program to display the best possible options for the next few moves. Its use also lets you see how far ahead the computer is thinking.
7. Do you want white ? - asks for the choice of color and priority in establishing the first move.

In addition to the set-up options, the player has interactive options while playing a game:

1. **Q**- Quit; ends the game. You have the option of saving the game to disk (although you must be a little careful naming files here, since the program will overwrite similarly named files). A disk-saved game may be resumed by entering "MYCHESS filename.ext" at the CPM prompt.



MYCHESS.COM

STOCKCHIP

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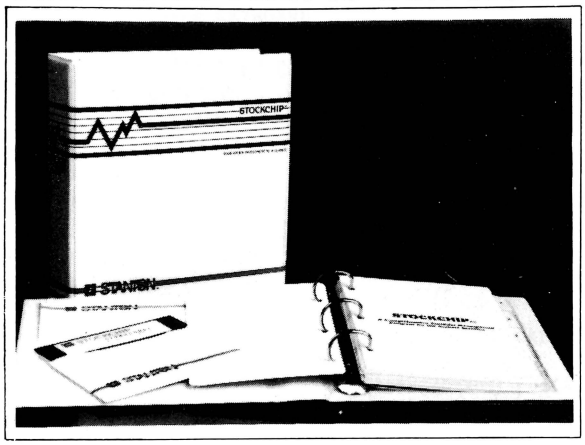

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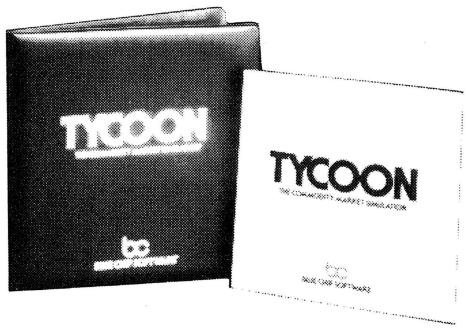
2. **P-** changes the search play setting, or foresight if you will.
3. **R-** reverses the board, allowing for switch of positions.
4. **GO-** makes the program execute the best possible move it has discovered so far. If you are using a high search play setting and become impatient, use this option to force an immediate move.
5. **S-** turns the self-play mode ON. The computer will play itself, relating "I move here", "I move there", but coming to the irreversible ending: "YOU Loose". And you weren't even playing!

As opposed to some computerized chess games that allow cursor positioning for move making, MYCHESS uses a coordinate system to indicate piece movement. For example, for an opening you would enter "d2-d4" and then hit the return key. The piece does not move until after the return key has been hit; there is no easy way to recall a move once it has been made. So, if you are the type of player who likes to place a piece tentatively and see what the board looks like before finalizing a move, realize that this program does not have this capability.

A bell sounds anytime you input either an illegal move or fail to use the proper syntax in indicating your move. This is the same system used to record moves on the printer or save to a file for later examination. The failure to designate the associated piece location with each move will be an inconvenience to some.

Although not pointed out in the documentation, the interactive game options do allow you to let the game make a move for you if desired. Simply initiate the self-play mode, and after the program has generated your move and before it has had a chance to make its own move, enter 'go'. This not only forces it to move, but it also turns off the self-play mode.

As with other computerized chess games, vanity, greed, caprice, poor judgment, oversights, miscalculation and all the other foibles that chessplayers possess will not hinder this mechanical player. It is consistent, flawless, foresighted and ever logical. The ability to initiate the self-play mode makes an excellent teaching tool. Having such an opponent can allow one to advance considerably in the art of tactical chess playing. Advanced chess players will find MYCHESS to be as worthy an opponent as any computerized chess game, although probably not as flexible as some. ■



TYCOON

by Larry Hufty

SPEC SPOT

Product: Tycoon Commodity
Type: Simulation Game
Computer: QX-10, QX-16
Operating System: MS-DOS
Required Peripherals: Titan QXPC 2 for QX-10
Price: $49.95
Ease of Use: Menu driven, easy to use.
Performance: Highly accurate and realistic.
Documentation: Extremely well written.
Summary: Action packed simulation into the world of commodity futures trading.
Manufacturer:
Blue Chip Software Inc.
6744 Eton Ave.
Canoga Park, CA 91303

TYCOON is a fascinating program that allows you to dabble in the most exciting, fast paced financial speculation in the world without risking a cent. Tycoon will introduce you to the thrilling, action packed world of commodity futures trading. As with Millionaire (The Stock Market Simulation game by Blue Chip), Tycoon is extremely accurate in its assessment of the commodity market. It takes into account price changes due to seasonal price fluctuations and built-in market and weather conditions. Tycoon's built in program generator gives you the ability to generate an endless stream of economic scenarios.

The documentation is extremely well written and leaves no question unanswered. (It even goes as far to warn experienced commodity traders that some of the symbols were changed to assist the novice.) Prior to starting the game, the manual gives a nice explanation of the commodity market and the terminology. Blue Chip has a 10 minute demonstration program on the disk. For the inexperienced, this demo can provide some good examples of strategies and techniques. Starting a new game requires the program to generate a 52 week scenario, which will take a few minutes. Then up to 14 people can play along, each utilizing the same market. If you want to stop a session before the 52nd week you can store the complete game status, including the market environment and recall it later. WARNING — only one game can be saved on the disk at a time. If you have saved a game and subsequently your friend saves a game, the first saved game will be erased.

Tycoon is a menu driven game, with several options. You can advance to a new week, or do a number of actions:

1. DISPLAY GRAPHS of the price movement on any of the 15 different commodities (such as soybeans, wheat, porkbellies, oil, gold, yen etc.)
2. BUY/SELL a position
3. DISPLAY PORTFOLIO of your holdings, showing profit and losses.
4. NEWS items and price changes
5. COST of commodity prices for that week
6. DESCRIPTION of the individual commodities

At the beginning of play, you will have $10,000 to work with and will be considered a novice. As a novice, you can only trade 4 commodities. As you progress, so does you ability to dabble and invest. At a net worth of $15,000 you can trade an additional 4 commodities. At $30,000 you can begin to take on short positions. At $90,000 you are up to 12 different commodities and at $250,000 the whole field is open to you. At each step, the amount you must deposit (your margin) goes down, so you can buy more for the dollar.

At the end of the 52 week period, which is December 22nd, Tycoon converts your holdings into cash. This amount, plus your status, is saved by the computer. You can then start a new 52 week session with the cash and status earned in the previous session. Over a number of sessions, with a little luck and a lot of skill, you may become a Tycoon.

As I mentioned with Millionaire, this game was written to be enjoyed by both the novice and the seasoned market player. I found **TYCOON** to be highly accurate and realistic. It is an invaluable tool for gaining risk-free experience in a highly risky business. And above all — it's fun! ■

QX-10 SOFTWARE

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Rising Star Industries Announces its

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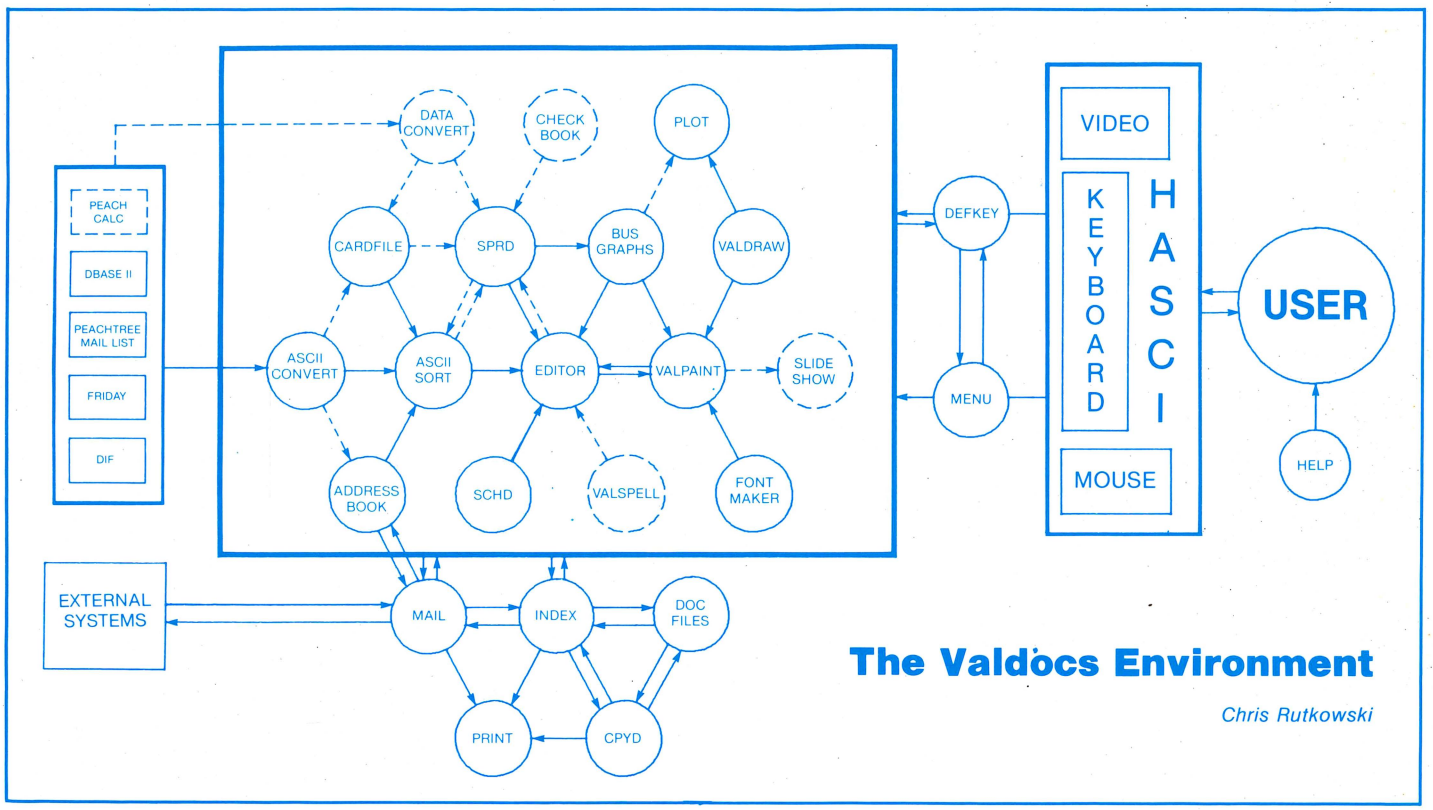
The Programma



The Valdocs Environment

Chris Rutkowski

Valdocs® started out as an impossible dream, described in the September and October 1982 issues of BYTE magazine. Then Valdocs 1 proved integration and ease of use could co-exist on a micro. Valdocs 2 added features and provided a platform upon which to build. And finally the dream becomes reality for most users: Rising Star announces *Valdocs+*.

Valdocs+ offers *data integration* — the ability to pass data among modules. It offers *faster operation* in both the editor and spreadsheet. And it offers a feature never before seen in an easy-to-use integrated system: *programmability.*

Do it yourself Mail Merge

Using the Valdocs Editor's sensational new "Multiple Lookfor and Replace" capability, data from the Addressbook and Cardfile (as well as data from Peachsoft's List Manager, DIF files, DBASE II and FRIDAY) can be sorted and merged with normal text documents. And because the data is actually merged into the editor, documents are fully reformatted, can be micro-space justified, make full use of fonts, and can be combined with graphs, charts and illustrations, etc. Most amazingly, *Mailmerge,* usually a separate program, is actually programmed *by the user* as a DEFKEY macro. This is only a sample of the programmability that will be introduced in Valdocs over the next few months.

Graphics in Text

Want to insert a business graph, spreadsheet or painting into your editor document? Easy. With the picture on screen, press the EDIT key. Pass spreadsheet data to the editor? No problem. Press EDIT. It is no more difficult than chaining from one module to another. As an example of a useful application, use PAINT to make a copy of your company logo, then put it at the beginning of one of the Valdocs editor's 8 *default documents:* instant letterhead! Available *anytime* with only 4 keystrokes.

Valdocs: More than just a program.

Valdocs is more than a program— it's a *programmable environment.* In the accompanying chart you can see, for the first time, the planned scope of that environment. Solid lines represent modules or integration paths *already* present in Valdocs+. Dotted lines represent modules and integration paths which will be completed and implemented during the next few months. Look it over. *NO integrated system offers as much versatility as Valdocs+.*

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In celebration of the release of Valdocs+, Rising Star is launching the most innovative marketing program ever seen in the software industry — Software Buying Simplified.

The entirety of the Valdocs Environment as it now exists, and every enhancement and improvement depicted in the chart is available for the low package price of $349.

There are *no* strings attached. No extras. No handling or update charges. *Every* new or revised module we develop, *every* new program, *every* new feature and *every* bit of documentation written will be sent out to all registered Valdocs+ users at least once every 60 days until the Valdocs Environment as outlined for the QX-10 and the QX-16 are *done.*

Guaranteed enhancements include *ValSpell* (an integrated spell checker and thesaurus), *ValCheck* (an electronic checkbook integrated with the Spreadsheet), *Slideshow* (for presentation graphics), Valpaint 2 (with built-in Hershey Fonts), *Valdraw 2* (greatly improved accuracy and a host of new features), plus much more in the way of Editing, Spreadsheet and integration features.

You even have options on how to purchase

First, as described above, you can purchase the entire Valdocs Package for $349.00 (without a mouse) or $449.00 (with a mouse). In addition, anyone buying this package will receive a $49.00 discount if they have already bought Valdocs 2.

Attention Valpaint/Valdraw owners!

If you have already purchased Valdraw and Valpaint, and sent in your warranty registration card, you can purchase the entire Valdocs package as described in this Ad for a one time fee of $49.00 to cover the costs of media, distribution and documentation. It's our way of saying "Thanks for the on-going support."

Second: Summer vacations or back to school expenses left you a bit short on cash? We've got you covered. Now, for the first time you can make your software purchase on the *installment plan.* Under this plan credit card customers can purchase the Valdocs package with a mouse for $78.50 at the time of purchase and $78.50 a month for six months.

Third: You can always continue to purchase our products as you have in the past, a module or program at a time. Bought this way, Valdocs+ (without Valdraw, Valpaint, Dictionary or other planned enhancements) is available for only $249.00, with a $49.00 discount if you have already bought Valdocs 2. Prices of other products will be as published elsewhere.

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*A bug is defined as any deficiency in the program code which results in that program failing to perform a function for which it was designed, in the manner intended by its designers. Limitations inherent in the computer or peripheral hardware will not be considered bugs.

**A fix is defined as code corrections which result in the program performing the function for which it was designed in the manner intended by its designers.

All reports must be made in writing to Rising Star's Customer Services Division and must be sufficiently detailed to allow the bug to be reproduced by Rising Star personnel.

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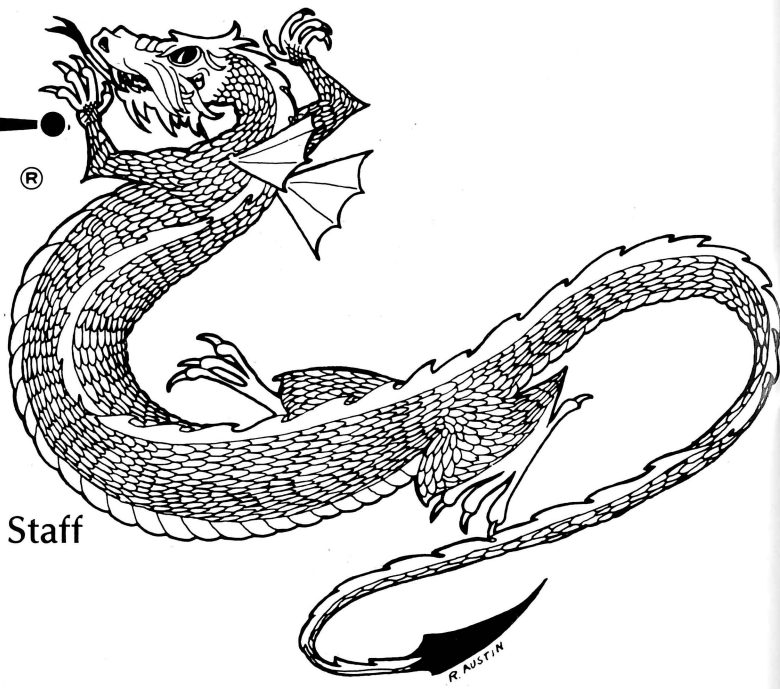
Wizardry®



by E.C. Staff

SPEC SPOT

Product: Wizardry
Type: Adventure Game
Computer: QX-16 (8088 CPU), not QXPC2 compatible.
Operating System: Contains its own loader tracks, no DOS required.
Documentation: Adequate.
Ease of Use: Easy for a seasoned game player, difficult for a novice.
Summary: A fantasy role-play adventure game. Survival depends on creating characters, developing adventure teams, and tracing your moves carefully.
Manufacturer:
Sir-Tech Software Inc.
6 Main Street
Ogdensburg, NY 13669

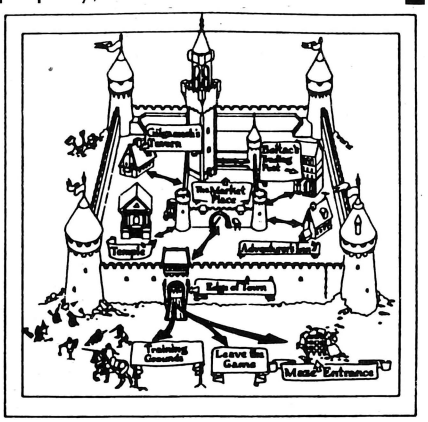
Wizardry is a sophisticated, exceedingly flexible adventure game, written in PASCAL. The game begins with the creation of characters. There are six basic characteristics for each character: strength, IQ, piety, vitality, agility, and luck. There are several classes (or occupations) available for your character: fighter, mage (sorcerer), priest, thief, bishop, samurai, lord, and ninja. You will also be asked to determine the race: Human, Elf, Dwarf, Gnome, or Hobbit. You will create characters, determine whether they are good, neutral, or evil, and add values to their basic characteristics like; strength=10, IQ=18, and such.

Magical spells may be cast, monsters fought off, items sold or traded, and adventure trips arranged.

This game is designed to involve several players (up to six), each which can control one or more other characters. A screen representation of the corridors you travel through is displayed, along with a description of your available moves. Plan on sketching a map so you have a record of how to get back out.

The game is not as graphically interactive as some of the more recent game releases, however the uniqueness of this one lies in both the amount of character development you are involved in, and the opportunity to play it with friends.

SETUP NOTES: On the QX-16 you should have dip switches 1, 6 and 7 down (IBM Monochrome mode). If you are using a color monitor, dip switches 1, 5, and 7 should be down (IBM Color mode). The program will ask you if you have a color or monochrome monitor attached. With the QX-10 and Titan QXPC2 card, we found that Wizardry does not load properly, thus it does not run. ■



Wizardry Map

Epson Geneva PX-8/HX-20 Software Applications

CALCU-LIST II
Plan a budget, print an itemized bill, balance a checkbook and more. Epson printer and 4K Ram memory required.

GALACTIC WAR
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— PROGRAM PRICES —
Epson Geneva PX-8
Microcassette Version . . . $25.00 each
Epson HX-20 Microcassette
Version . . . . . $18.00 each
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Printer Ribbons . . . . . $ 3.75 each

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Techni-CALL

by Bob Hermann

SPEC SPOT

Product: Techni-CALL (Version 2.2)
Type: Computer Assisted Local Library
Operating System: CP/M 2.2 B or CP/M 2.25 B
Price: $395
Ease of Use: Very Good
Performance: Good
Documentation: Good
Summary: Provides computer access to Epson and Comrex technical information.
Manufacturer:
Epson America, Inc.
Technical Services
2780 Lomita Blvd.
Torrance CA 90505

Techni-CALL is a computerized library of over 300 documents originally developed to meet internal needs at Epson America. Operating on a run-time version of dBase II, it contains a plethora of technical and general help information on both Epson and Comrex products that Epson user groups and dealers are sure to find useful.

The system is menu driven, making it easy to operate. Packaged in a three ring notebook containing the necessary documentation, one system disk and five data disks, it is operable on either a floppy disk system or a hard drive.

Operation is straightforward. The system requires installation, with two sets of instructions on how to accomplish this (one for "experts" and one for the rest of us). This procedure is well documented, and is accomplished in less than ten minutes. When done you can initiate the program by entering "tcl" at the CP/M prompt.

The first first thing you will see is the main menu, which offers nine options:

1) System Configuration (setting up for a hard drive, etc.)
2) Document Directory (hard copy only)
3) Search by Document Code
4) Search by Keywords
5) Desktop Computer Information
6) Portable Computer Information
7) Printer Information
8) Comrex Product Information
9) Exit Techni-CALL

Undoubtedly the first thing to do is to use option 2 to obtain a hard copy of the document directory. This will result in a six-page-plus listing of the over 300 documents currently on file in the system. I say currently because Epson promises to supply updates at regular intervals, with one of these due shortly.

Looking at the list of documents, one sees that about 60 contain the word "specifications" in the title, indicating that these contain the specs on the respective products. One also notices a list of "Interface Data" documents, which provides information on using Epson printers with a wide selection of computers. To give you a flavor of the remaining titles, some of the other documents include:

- Accessing MCI Mail and Dow Jones through Valdocs
- Using PeachTree Spelling Checker with WordStar
- HX-20 Battery Temperature Test
- Speech Synthesizers with the Geneva
- Timing problems with the LQ-1500 and FX-series printers

The listing shows not only the document title, but also the category (either printer #1 or #2, desktop, portable, or Comrex) in which it is classified, and the document code.

Information may be accessed in three different ways. First you may chose options 5-8 of the main menu to get at documents in the respective categories. Selection of the Portables option brings up the following menu:

HX-20		PX-8
1.	Hardware Specifications	4.
2.	Software Descriptions	5.
3.	Applications Information	6.

Election of one of these options elicits a selection of documents whose contents you may have directed either to the screen or a printer. If you are set up on a floppy drive and do not have the appropriate data disk in the computer, you will be told which disk to insert to obtain the chosen document. You may then "Retrieve" the document to the screen or "PRINT" it to your printer, or "UNDO" to abandon the process altogether.

A second method of document recall is the document code number from the directory that you have printed out, option three from the main. Again you have the option of directing the output to screen or printer.

The third method of document retrieval is by key word search. All of the documents have been indexed by words in their titles. The user selects option 4 from the main menu and is prompted for keyword(s) for which to search. As an example, if we give the two words, "PX-8" and "WordStar", we are told that there are no documents found containing these two words. However, if we search by "WordStar" alone we find eight documents, five of which have to do with Portable WordStar. This illustrates that the search methodology leaves something to be desired, and that you may have to attempt several strategies to find what you want. Nonetheless, this is preferable to leafing through six pages of document titles looking for a specific topic.

As an illustration of the usefulness of the contents of Techni-CALL, the EpsonConnection has asked and obtained permission to periodically publish some of those documents that we feel will be of interest to our readers. Indeed, the creators of the program encourage comments about not only the operation of the system, but also the contents of the documents and are very open to suggestions concerning future inclusions.

To this end, I think it might be convenient if the document directory (option 2 from the main menu) could be directed to the screen as well as to a printer. I don't see how they could otherwise improve the operation of the system — it's quite straightforward and simple. The documents presently in the system certainly do not contain all the answers to all the questions that could be asked about Epson and Comrex products. They do form a solid basis, however, that would benefit user groups and dealers alike. ■

Deadline & The Witness

by John Hirsh

SPEC SPOT

Product: Deadline and The Witness
Type: Interactive mysteries
Computer: QX-10, QX-10 with Titan Board, QX-16, PX-8
Operating Systems: CP/M, MS-DOS and PC-DOS
Price: $40-$45
Ease of Use: Excellent. [Deadline, rated at expert level, is "for real diehards seeking the ultimate challenge." The Witness is rated standard which is a good introductory level for adults.]
Performance: Excellent
Documentation: Deadline: inspector's casebook.
The Witness:
"Detective Gazette," newspaper, telegram, matchbook.
Manufacturer:
Infocom, Inc.
55 Wheeler St.
Cambridge, MA 02138.

Infocom's Deadline and Witness can turn a mild-mannered QX or PX owner into an Hercule Peirot.

Deadline is an expert level game, Witness is standard. There's a suggestion in each game that the identity of the murderer could change depending on the way you gather evidence!

Deadline is on an old CP/M QX-10 format. Not the best. So I run SZENITH.COM instead of the recommended configuration program, SADM3.COM. To start type DEADLINE. SZENITH gives a reverse video status line showing your location and time of day.

Marshall Robner, an industrialist and philanthropist, was found dead in the library of his home on the night of July 8, 1982. Robner might have been a victim of an overdose of Ebullion, a medicine which he had been taking for severe bouts of depression. He had been alone. The door to his library had been bolted from the inside. Police had to break down the door with axes to get inside.

Warren Coates, an attorney, asks you, (the chief of detectives of the Edindale Police Dept.), for help. In a letter dated July 9, Coates said he did not suspect foul play but he thought an investigation should be undertaken, "if for no other reason than to quash the suspicions which are inevitable in these circumstances."

You go to the Robner home at 8 a.m. armed with a casebook containing the Coates letter, a coroner's report, a lab report on a porcelain teacup, a memo from G.K. Anderson, detective 1st class, a photograph of the outline of a body, three tablets (presumably Ebullion) and excerpts from interviews with five people.

Mrs. Robner allows you to investigate but only gives you until 8 p.m. to finish (A deadline!!!!!!)

You will make maps of the area and conduct interviews with suspects by saying, for example, "Ms. Dunbar! Tell me about Mrs. Robner." You can develop information by asking Ms. Dunbar about Mrs. Robner, Mr. Baxter, George Robner, Mrs. Rourke (the housekeeper), and Mr. McNabb (the gardener). Assuming the principals are truthful (and I can't) it is possible to triangulate the evidence by asking everyone about everyone else. You can show evidence to the suspects and watch their reactions. If you type "Show the note pad to Ms. Dunbar," the program says "Ms. Dunbar seems to be getting impatient."

Now, I have to confess that I did not start Deadline by going straight to the front door of the Robner house. I really started the game wandering around the lawns of the estate, trampling Mr. McNabb's roses and almost falling into the lake. I even got knocked off by a random number generator disguised as a suspect. I needed ... a hint book!

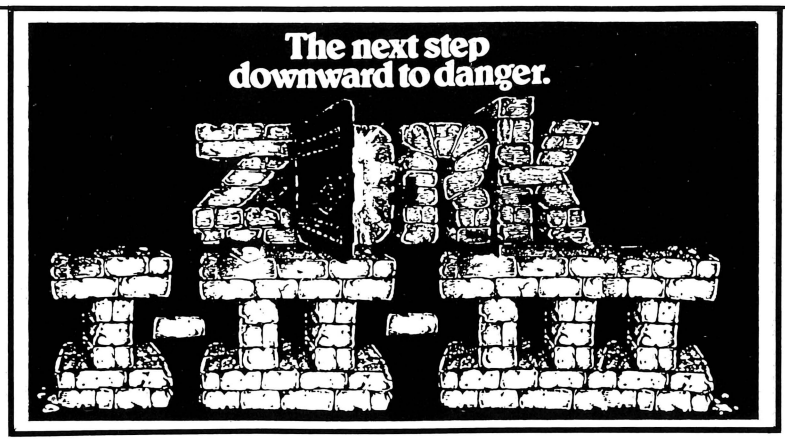
The Deadline Hint Book, which sells for $7.95 direct from Infocom, is divided into six sections labeled "The Basics," "General Questions," "Develop Only If...," "Hidden Questions," "Possible Endings," and "Four Your Amusement (after you've finished the game)". The sections are interrelated to the point that parts of the "Develop Only If" section suggest looking up information under the "Hidden Questions" section. Well worth the money.

Now, Witness, a standard-level game, takes place in February 1938, and is one of four Infocom programs with a custom made Epson QX-10 configuration. Just type WITNESS and get a bold-face location on the top left of the monitor and a bold-face time on the top right. Time is important. You have from 8 a.m. to 8 p.m. to solve the mystery.

The story: Prominent socialite Virginia Linder, 49, takes her own life, leaving an accusatory suicide note. Within a day, Freeman Linder gets a threatening letter from Ralph Stiles, Virginia's lover. You, the detective, are summoned to Lindner's home, a mix of California bungalow and East Asian styles. Linder's daughter, Monica, goes out to a movie while you're interviewing Linder. Then someone knocks Linder off while you're in the Linder home. You are both witness and prime suspect in the crime. What a revolting development for a detective to be in!

Witness comes in a well designed box containing informative detective articles and hidden tips, a matchbook, a summoning telegram, and a page from a newspaper. Each object has a wealth of tips. But if they're not enough, *The Witness Hint Book*, sold separately from Infocom, comes with a map from Wiley's Hot Sorghum Flakes.

John Hirsh uses his Epson HX-20 and QX-10 for his work as a freelance writer and suburban news reporter for The Milwaukee Journal. He runs an EpsonNet RBBS, one of the oldest in the country, on a 2400 baud modem. He is Epson Envoy and newsletter editor in the Wisconsin Epson [WISE] user group. ■



by John Hirsh

SPEC SPOT

Products: Zork I, II & III
Type: Interactive text games
Disks: 5.25" and 8"
Computer: QX-10 (version available for PX-8)
Operating Systems: CP/M (can be run in RAM on CPM 2.2B series), TPM or VALDOCS MENU of Applications in reverse video.
Required Peripheral: none, but printer helps
Price: $39.95 to $49.95.
Documentation:
- Zork I and II:
  Our Circuits, Ourselves
  The Heroic Struggle of Micro-Americans to be Free (the story of a population of computers that shut themselves down until they get to play Infocom games)
- Reference card for CP/M
- Zork I, II reference books
- Zork III:
  Frobozz Co. International Annual Report, 778 GUE Purported annual company report in full color. Instruction manual, stock certificate and letter from Frobozz Co. President, James D. Flathead IX, in two colors.

Additional Aids: Maps and hint books with "invisiclues" are available from "Bilk & Wheedle", Fiduciary Insurance Corporation of Upper Mongolia. Bilk & Wheedle: "It's not just a name — it's our way of doing business" $7.95 per hint book with map and marker,
The New Zork Times, a newsletter from Infocom, is free to those who are registered. It has bug reports as well as reports of new games.
Ease of Use: Zork I, Standard: introductory level for adults. Zork II & III, Advanced: recommended for those who've already experienced Infocom's interactive fiction.
Summary: Holds your interest. Graphics are superior; they're all in the head. Zork is the standard by which all others are measured.
Manufacturer:
Infocom, Inc.,
55 Wheeler St.,
Cambridge, MA. 02138

You might start an interactive game on an Epson QX-10, QX-16 or PX-8 when the leaves are green. You'll look up once to see them turning color. When you look up again, you'll wonder why the flurries have started to fly. When eventually you go to the refrigerator to get some refreshment, you'll discover your spouse and kids have left home leaving no forwarding address.

What is so intriguing about interactive games is that your choices determine the course of the story. You can pick up, examine, manipulate or discard objects; walk, run, climb or jump; attack or befriend other creatures. You can draw maps and develop strategies.

Zork I started out as an adventure game in the MIT computer labs. It was re-worked and released to the public in 1980.

The clever writing is peppered with vivid description. Here is an example from a bit of promotional literature that tells the story of a micro-computer revolt. The pamphlet is called: "Our Circuits, Our Selves, the heroic struggle of micro-Americans to be free."

> **9:23:21**
> picture of IBM screen with caption that reads:
> "I'm mad as hell, ergo, I'm not going to take it anymore."
>
> **9:23:25**
> picture of electrical explosion with caption that reads:
> "Stop-action photography follows one microcomputer's neo-Cartesian introspection to its quasi-Sartrean conclusion."

Now, some of us who are familiar with application programs are used to thinking that VALDOCS 2 is an upgrade to VALDOCS 1 and Rbase 5000 is an upgrade to Rbase 4000. But Zork I, Zork II and Zork III are three separate adventures. Zork I starts outside a house. Zork II begins in a barrow.

The problem for the player or the adventurer is to discover the most efficient series of choices. The "critical path", to coin a phrase.

There are many ways to end a story. Common ones include death, followed by resurrection. I've died many times. Here is how it once happened in Zork I:

> "The thief, forgetting his essentially genteel upbringing, cuts your throat. It appears that that last blow was too much for you. I'm afraid you are dead.
>
> **** You have died ****
>
> "As you take your last breath, you feel relieved of your burdens...."

Here is how it happened in Zork II:

> "The Wizard, in a deep and resonant voice, speaks the word "Fall!" He cackles gleefully...
>
> "You find yourself drawn toward the edge of the bridge. You peer over the side. Oops, that was clumsy of you. You tripped on something and fell in. Too bad.
>
> **** You have died ****
>
> ... You are in a huge crystalline sphere filled with thin red mist."

But Zork games are more than making choices: you could do that in an interactive book. Zork, being a program, means that each room or situation is a subroutine and that some subroutines are randomly generated.

In Zork I, for example, you can get killed simply by not attacking a creature when you enter his room. You can also get killed by meeting up with and not choosing to avoid a randomly - generated thief. In Zork II, you can get killed by a randomly - generated wizard. In Zork III, there is a dangerous shadowy figure.

Once you're killed you can easily be resurrected. But I'm not sure resurrection is worth the trouble. You never come back as a whole

adventurer. And you waste precious time gathering scattered weapons and treasure. My own solution to death is to push the QX-10's reset button.

Some people like to play the games without help. On the other hand, I know some parents who after working on Zork I for over six months, have enlisted the aid of an 11-year-old daughter and won the game.

I don't have any kids over five. So I spent $7.95 on a Zork I hint book. It comes with a map and a felt-tipped marker. When you apply the marker to a blank box, a hint appears. Some hints are good. Others are red herrings designed to blow your strategy.

One word about installation. Older versions of Zork have come on a CP/M disk with configuration programs. Infocom suggests using SADM3.COM. I found SZENITH works better for me on Zork I and SDEFAULT works better for Zork II. Our user group vice-president found that SXEROX worked better on his QX-10. The version of Zork III I got for review was pre-configured for the QX-10, so no configuration program had to be run.

I'm still waiting for the Zork II hint book and other games I ordered two months ago. Our user group treasurer said she ordered Zork I last summer, and it arrived in December. ■

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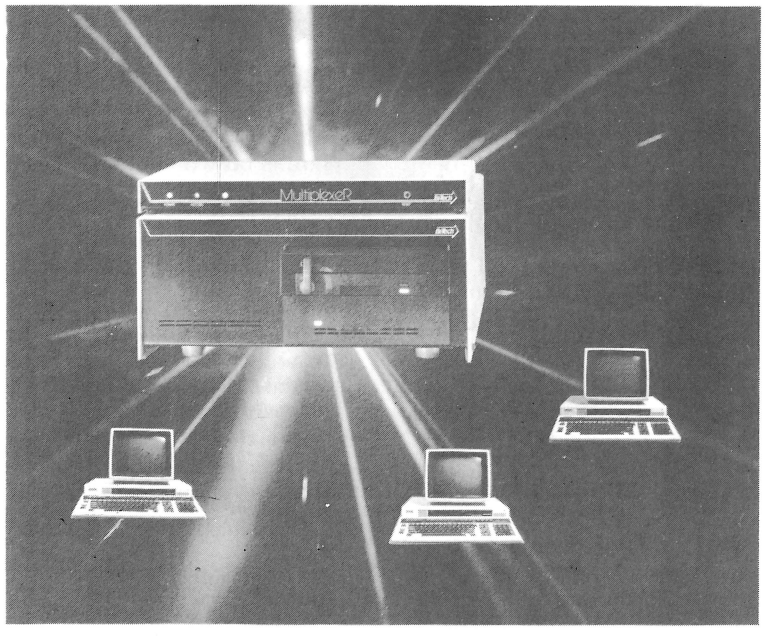

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QX COMPOSER

by Gary S. Corwin

SPEC SPOT

Product: QX-Composer
Type: Musical notation editor
Computer: QX-10, QX-16
Operating System: Valdocs 1.16, 1.18, 1.19, 2.0
Required Peripherals: Any of FX, RX, MX, JX or LQ continuous form, dot-matrix printers.
Price: $39.95 for current version. $69.95 for scheduled September release.
Ease of Use: Quite easy to use.
Performance: Good
Documentation: The ten page manual covers the program well. It is only necessary to read it once, as you start.
Summary: This impressive looking program is a combination of a "word processor" for music and a drawing program. By using the QX's advanced graphics capabilities, it allows you to create and print very professional-looking manuscripts. Although many of the operations are painfully slow, and it lacks some of the more sophisticated features (such as block moves or transposition), the program is well worth the price. An improved version, featuring "macros" is due out in September.
Manufacturer:
Grossman Productions
1752 Branard St.
Houston, TX 77098
(713) 523-2316

To avoid any misunderstanding it should be stated that QX-Composer does not actually "play" music; it only allows you to write it. This program is no toy. However, it would be a fairly good learning tool for beginning and intermediate music students of any age.

What It Can Do

QX-Composer is a combination "word processor" for music and drawing tool. It allows you to enter, store to disk, retrieve and edit, and print almost any type of music notation desired. Although the program is cumbersome, the elegance and precision of its final product nevertheless make it well worth the price.

The manual is short and clear but the program is so easy to use, that I seldom found myself referring to it.

In order to run QX-Composer, you must first boot-up Valdocs, and then call up QX-Composer through the <MENU> of Applications command. For Valdocs 1.X this means the program must reside on the data (right drive) disk. Valdocs 2.0, however, allows you to switch disks and run the program out of the left drive. The right drive can then be used exclusively for the music files you create.

The manual is short and clear but the program is so easy to use, that I seldom found myself referring to it. A keyboard overlay, unfortunately made out of paper, comes with the program. It is an indispensable item due to the fact that QX-Composer redefines the top alpha-numeric row on the keyboard (i.e., MAR REL, through all the numbers, to LINE). These keys, along with SHIFT and GRAPH SHIFT, represent nearly every musical notation you will need; from sixty-fourth notes to accent marks to bass clef signs.

The program will set up a file (up to 30 pages long) by drawing in the staves in one of four different formats:

1 - score
2 - solo line
3 - solo line with piano accompaniment
4 - piano

Essentially, it gives you "blank" manuscript paper to work with. You must then fill in all notes, symbols and words on the page yourself -- one at a time. Make no mistake about it, writing music with QX-Composer may be easy, but it's not quick. The benefit is purely in the quality of the print, and the ability to go back and edit.

You can move the cursor to any point on the page in two different speeds: the normal speed, and the "micro cursor" speed, wherein cursor actually crawls along one pixel at a time. When the cursor is where you want it, you press the appropriate key and the note, rest, symbol or alpha-numeric text you choose is drawn on the screen. To erase anything you have drawn (other than the staves), you merely move the cursor back over the item and press UNDO. QX-Composer also lets you draw circles, arcs and thick or thin lines wherever you want them on the page. It is this combination of keying in symbols and drawing in lines that gives the program much of its flexibility.

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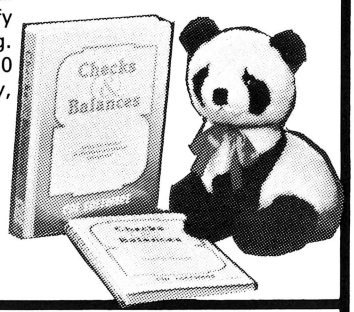

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What It Can't Do

The program does have a few serious drawbacks. The first one is speed. Moving a pen by hand to a point on the page and drawing in a note is much quicker than moving a cursor and pressing a key. Even allowing for mistakes, an experienced music transcriber could write circles around an experienced QX-Composer user. It also seems to take forever to "paint" the screen when you first retrieve a file or whenever you print one out.

"Blocking" is another of my complaints against the QX-Composer. The program allows you to "square out" and then erase any section of the screen, but it allows no other block maneuvers. It quickly becomes tedious to have to re-draw the key signature for each line, or worse, to have to rewrite entire duplicated sections of a score. Also, the program has no ability to transpose from one key to another, something else that would be a time saver and would make QX-Composer more useful. It is through advanced utilities such as these that a music writing program could actually become as fast or faster than writing by hand.

New Version Coming Soon

A new version of QX-Composer, due out in September, will deal with some of my complaints. Principally, it will have a "macro" capability. In other words, a user will be able to program a series of repetitive key strokes (such as drawing in a key signature) to occur at the press of one or two keys. This should speed up the program considerably. However, the price of this improved version will be higher, at $69.95. (Upgrades for current owners are scheduled to be approximately $20.00.)

Summary

QX-Composer is definitely not for everyone. It is simply too slow. Nevertheless, people who have trouble writing readable music will find that, for a very reasonable price, this program will allow them to produce near-typeset quality manuscripts. And, although the program has its share of drawbacks, it does exactly what it sets out to do. That is, it provides QX-10 and QX-16 owners with a very easy, usable program with which to write music. Finally, the new release looks like it will be a big step in the right direction. ■

NEW PRODUCTS

QX ASTROKEY
CP/M $49.95

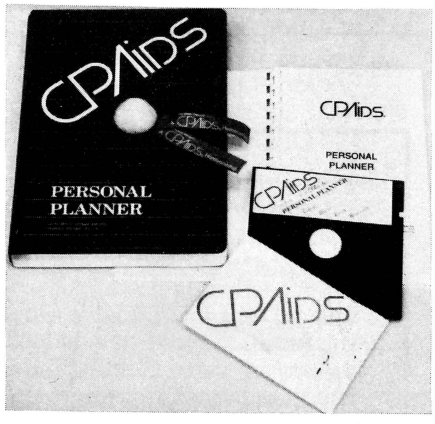
This is the ultimate key redefinition program for CP/M B on the QX-10. Designed especially for the QX-10, it provides easy HASCIIZATION of application programs.

ASTRO RESEARCH, INC.
Box 74
Corvalis, OR 97339

QX LISTER
CP/M $19.95

LISTER will neatly list a BASIC program letting you format the output. You can set top, bottom, and left margins; and print name, date, and page numbers on each page of the listing.

B & R Software
P.O. Box 364
Tipton, IN 46072



QX PERSONAL PLANNER
CP/M $49.00

With this program, end users can perform sophisticated tasks which would be too laborious or complex to be accomplished by hand. Concise and easy to use, Personal Planner can calculate tax liabilities for 1984 through 1987. In addition, it organizes all relevant information, keeps everything available for instant evaluation and provides accurate and efficient record keeping.

CPAids
1061 Fraternity Circle
Kent, OH 44240

QX Quant-m Controller
CP/M $100.00

This business system consisting of seven totally integrated software modules was designed with extensive human factors engineering concepts. The seven modules include: Purch/Rec, Inven, Acc Rec, Acc Pay, Checking Acc, Gen Led, and Code Access. Featuring 'screen format document processing', the system is individually configured for each customer by the authors. The low price is due to the vendor's conviction that software is no more expensive to produce than textbooks.

Quant-m Corporation
4096 Johnson Road
Lockport NY 14094

PX PX-8 Toolkit
CPM $65.00

The toolkit provides the high-level language programmer with access to all of the PX-8's special features including facilities such as checking battery level, setting alarm strings, and graphics. It is intended to make available all the additional features of PX-8 BASIC to programmers using much more efficient high-level languages. Access to these features is usually by means of subroutine or function calls within your source program.

SBBS
47A London Road
SevenOaks, Kent TN131AR
England

HX HX-CRUNCHER
$60.00

This program reads a BASIC program on the HX and outputs a compressed version to microcassette. It is capable of reducing the size of programs by up to 20 or 30 per cent. A companion program called LISTER re-formats files compressed by Cruncher for easier reading. Both programs are distributed on an 8K ROM which may be placed in either the expansion unit or the SkiWriter socket.

SW Assistance by Doug
1440 Guthrie
Des Moines, IW 50316

HX PARALLEL PRINTER INTERFACE
$99.95

These parallel printer interfaces are designed specifically for use with the HX-20 and PX-8. They are configured to use the power-up default communication settings of the computers.

Micro World Computers
3333 S. Wadsworth Blvd., C-105
Lakewood, CO 80227

QX PolyPrint
CP/M $40.00

This program yields near letter quality printing for most dot matrix printers. Using 4 passes of the printing head, 12 different type styles are produced. It will work with most normal word processing and spreadsheet files.

ARCOM
45B Princess Road, Branksome Poole
Dorset England BH12 1BG

QX MINIMUM DATABASE
CP/M $49.50

This easy to use database can keep almost any kind of record. It isn't a substitute for more elaborate programs like dBase II, and is not recommended for extensive financial databases. You can create a database for specific applications and later alter its format. Commands include: DISKIN, DISKOUT, CHOP, DELETE, RESTORE, LIST, MAIL LABELS, FIND, SORT, and STATISTICS.

Workman & Associates
112 Marion Ave.
Pasedena, CA 91106

PX PX-8 WORKBOOK
$24.95

This reference package (two books) is designed for the new Geneva owner who is either unfamiliar with the CP/M operating system or new to computers in general. In a series of exercises you will experience the most common features of the PX-8, from the operating system to the software supplied with it.

Computer Action
11500 Olympic Blvd. Ste. 150
West Los Angeles, CA 90064

QX-10

Preventive Maintenance

by Carolyn McCarthy

One of the tips demonstrated by an Epson technician during the Epson InterAct '85 was cleaning the fan screen in the QX-10. We found all our QX-10's needed this cleaning after one year of use. You can check your computer by putting your hand behind the main CPU unit on the right side near the power cord. You should notice a moderate flow of air coming from the fan (with the computer running). If there is only a small amount of air flow, feel the top of the computer unit to the right of the disk drive (this is over the power supply board). If this is quite warm, you should take your unit in to a dealer for cleaning, or do it yourself.

The steps are relatively easy to do. You will need a Phillips screwdriver (the one with a crossed tip), a small flat screwdriver, and a small container to hold the screws you remove.

1. Clear a table top to work on. Being sure your computer is unplugged, detach the monitor and keyboard and set them aside.

2. You need to remove the cover over the expansion slots. This is located to the left of the A drive. The two screws holding it on are located in the back of the computer. Remove these and lift the cover up and off.

3. Once this cover is removed, two screws are revealed which hold the case together (see figure 1). Remove these and set them aside.

4. There are two small square plastic covers on the top of the unit (see figure 2). Take a flat screwdriver and pop the covers off. Using the Phillips screwdriver, unscrew the two screws under these covers. (A magnetized screwdriver works well here because it will easily lift the screws out). Notice that the case is now loose.

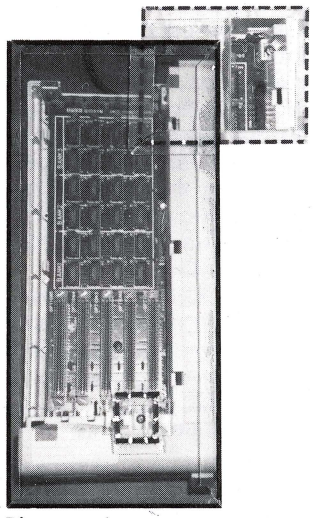


Figure 1

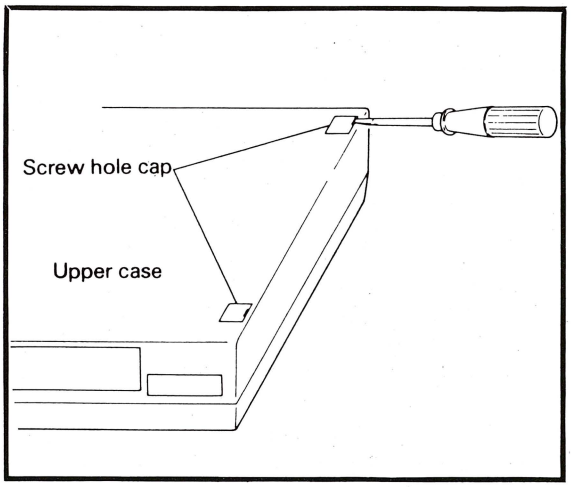


Figure 2

5. There are two connectors, one black and one white, which must be disconnected. They are located beside the expansion slot (see figure 3). You will need to lift up the back of the computer an inch or two to disconnect these. The black connector (CN6) has two tabs, one on each end, which can be pushed back to release the connector. The white connector (CN7) can be gently wiggled upwards. Do not pull on these connectors by the wires: be sure to grasp the connector itself.

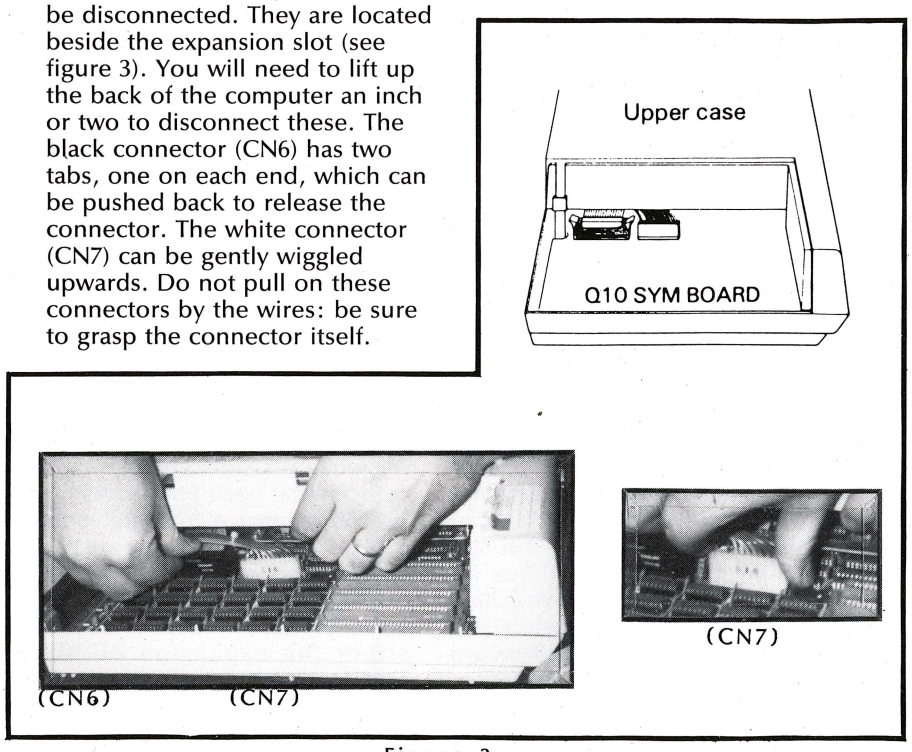


Figure 3

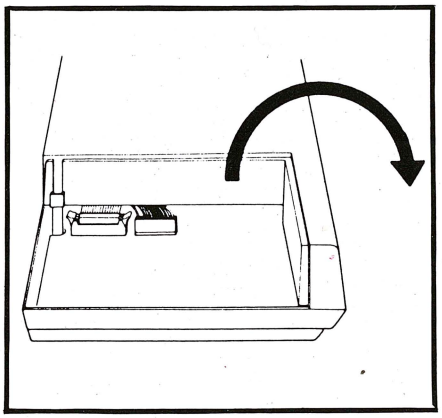
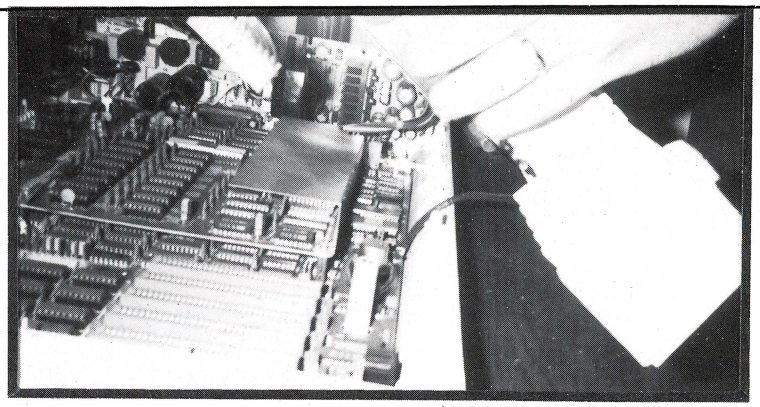
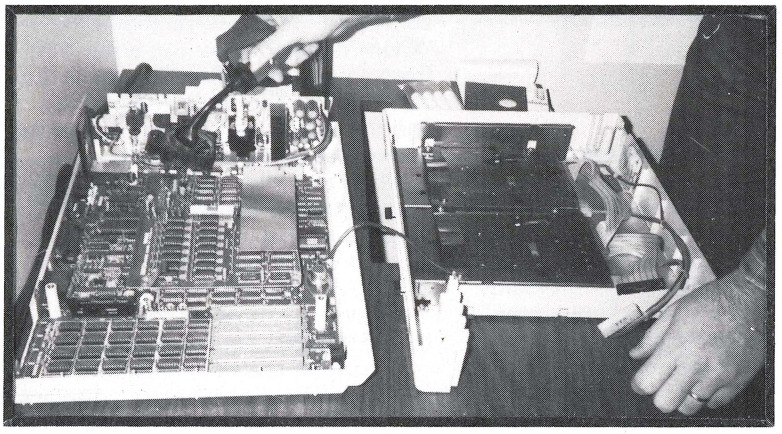
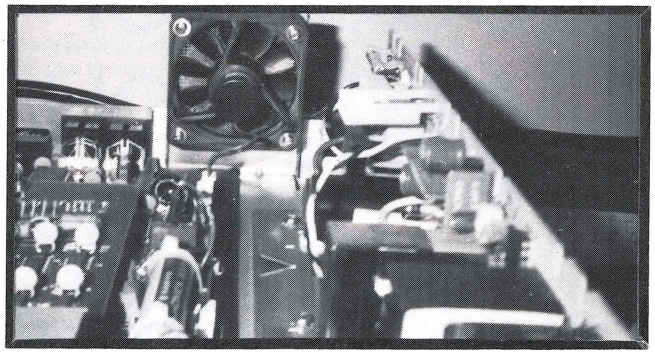


Figure 4



6. Grasp the top unit firmly, lift it up from the back and turn it over straight in front of the bottom unit. Connecting the two parts is a grounding wire located next to the A drive (see figure 4). There is no need to disconnect this wire.
7. The fan is located on the bottom unit in the far back right corner. Use a mini-vacuum or some other device to clean the screen of the fan.
8. If you choose to remove the fan screen for cleaning let us warn you about the screws. We found the bottom screws particularly hard to remove, and undue pressure on them could strip the screws or bend over the fan. Hold the fan securely while attempting to unscrew them. It is not necessary to remove the screen to clean the unit.
9. While the computer is open you may wish to use a vacuum (reversed so it blows out) to blow out dust particles which may have accumulated elsewhere. If you do use a vacuum cleaner be sure to remove the collection bag from inside the machine or you will blow dust into your computer.
10. Putting the unit back together requires doing steps 1-6 in reverse order.





Note: While the unit is open you might look around. The disk drives will be sitting upside down in the top unit. The video board is sitting on top in the bottom unit, and the power supply board is on the right side next to the fan. ■

Please be advised that, according to Epson America Technical Service Department, opening your computer unit will void any 12 month warranty.

EpConn UpNotes

By Allen Howell

This column is devoted to operations and files on the EpConn SOCIS BBS.

This month we'll discuss some VERY useful TPM commands that many callers fail to use when they exit to the DOS from the UBBS system, but first, let's get the passwords straightened out.

The Passwords:

There are TWO DIFFERENT passwords you will use on the system. The "front-end" password is the one you must enter in order to "log in" to the system. This password is set by us, and this month it remains **HASCI**. The next password you enter is your own personal password. You determine this password when you log on as a new user.

TPM Commands:

Once you exit to TPM, your primary goal is to download files. To help make this as easy as possible, there are several commands you may utilize from TPM. The single most important command for you to remember is "COMMANDS". You can enter this from anywhere within TPM (as is the case with all the other commands), and the system will display ALL of the commands that are available.

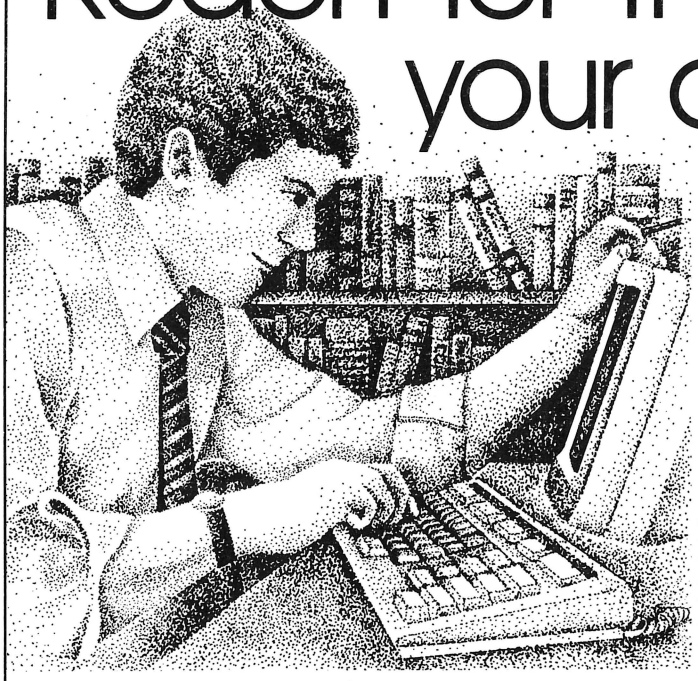
When invoked, "COMMANDS" will display a dozen or so other commands that are available to you, most of which are standard, such as DIR, TYPE, XMODEM, BYE, etc.

One of our "special" commands is the DESCRIBE command. This command operates in a manner similar to DIR, except it also displays a brief description of the files. If you enter "DESCRIBE" from any active drive/user area, DESCRIBE will display filenames and descriptions of all of the files in the logged in drive/user area. DESCRIBE may also be used with a limiting parameter. If you should want to DESCRIBE only the library files (.LBR), enter "DESCRIBE LBR". To describe one specific file, enter "DESCRIBE filename" where filename is the the name of the file you wish to describe. Note that entire filenames cannot be used, e.g., "DESCRIBE ZCPR.LBR", since the DESCRIBE command doesn't like periods. Also note that DESCRIBE does NOT support the CP/M wildcard characters (* and ?).

LUX is a fairly new utility that makes the manipulation of library files (.LBR) much easier. LUX is a replacement for LDIR, LTYPE, and XMODEM L (although these commands are still available). If you should want to examine a .LBR file, just enter "LUX filename" (no extension is required), then LUX will attach to the .LBR file just as if the library were another drive or user area. From LUX, you can perform the standard DIR, TYPE, XMODEM, and other commands upon the library members. Try it out, you'll like it.

(Continued on following page)

Reach for the height of your craft...



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* indicates 300 Baud only.
** indicates 300/1200 baud.
*** indicates 300/1200/2400 baud.
H.D. indicates Hard Drive.

We encourage all SYSOP's to contact RBBS/RTPM coordinator Ralph Ruh, Lancaster Ohio board, at least once every month to remain up-to-date as new developments arise in the system.

Uploads

Here is a listing of the newest software available on the system as of this writing. For a more updated list, select the UPLOADS file from the UBBS-II information module.

New Public Domain Software/Updated July 22, 1985

Al's Opinion Scale: ★ = Fair, ★★ = Good, ★★★ = Excellent, ★★★★ = Must Have, ??? = Unknown

FILENAME	RATING	SIZE	DESCRIPTION
A0:2400BBS.LQT	★★	8K	Listing of major BBS running at 2400 baud.
C0:FRONT46.LBR	★★★	38K	Good CP/M "front end" menu system.
A5:PUZZLE.RSI	★★★	6K	Addicting puzzle game for RSI BASIC. Uploaded by Mike Rehling.
D3:QMODEM.OBJ	★★★★	64K	Excellent modem program for the QXPC2 card. Must be used with Serial port modem (no CR-103). Downloaded from Steve Brown's BBS.
D3:QMODEM.DQC	-NA-	22K	Documentation for QMODEM.
C0:SUPERSUB.LBR	★★★	8K	A public domain replacement for the CP/M SUBMIT.COM program. A must if you use SUBMIT.
C1:VT100.CPM	★★	26K	Modem program that allows the QX-10 to emulate a VT100 terminal.
D3:STARS.BAS	★★★	56K	Displays the night sky on your QX-16.

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Ordering

MTBASIC is available for CP/M, MS-DOS, and PC-DOS systems for $49.95. MTBASIC with 8087 support is available for MS-DOS for $79.95. Shipping is $3.50 ($10.00 overseas). MD residents add 5% sales tax. MC, Visa, checks and COD accepted.

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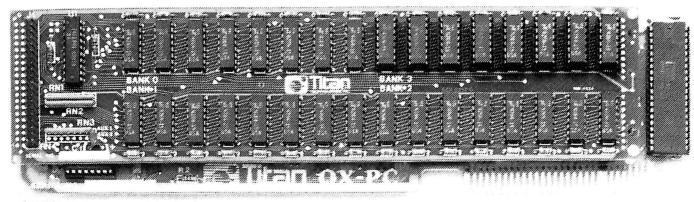

the co-processor card that lets your Epson play like an IBM.

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SIDEKICK

by Stephen L. White

SPEC SPOT

Product: SideKick
Type: Integrated electronic desk
Computer: QX-10 with Titan QX-PC2 Board & QX-16 (v.1.5)
Price: $49.95
Ease of Use: Very easy to learn.
Performance: Exceptional.
Documentation: Excellent. Examples of creative uses of the sub - programs are included.
Summary: Excellent integrated program with note pad, calendar and appointment book, calculator, ASCII table, and telephone dialer.
Manufacturer:
Borland International
4113 Scotts Valley Drive
Scotts Valley, CA 95066

Unless you are new to computers or you have just awakened from a year's slumber, you have undoubtedly heard of Borland International's SIDEKICK, for the MS-DOS environment. It is generally considered the "Program of the Year" (Info World, 1984). SIDEKICK is a little program that you load into memory when you boot up in MS-DOS. It stays in memory, ready to go while you run other programs. It is a collection of the following useful programs:

- Calculator
- Note pad
- Appointment calendar
- Automatic telephone dialer
- ASCII table for programmers

You call up the program menu in a window that overlays the application program you are in by pressing the Ctr. key and the Alt. (GRPH SHIFT on the QX-10 keyboard) simultaneously. Then, with one keystroke you can call up the sub - program you want while still working on another application. Better yet, pressing the Alt. key together with a letter, determined by the sub - program you want ("N" for Note pad, "C" for Calculator, and so on) will allow you to use two or more of SIDEKICK's features at once. What's more, you can cause the windows to move to any place on the screen so that you can see the work under them, such as your spreadsheet, document, or whatever.

In the Note pad sub - program, you can write notes to yourself or create an entire document. You can also "import" data or text from the application program you were working on before you called up SIDEKICK. Say, for instance, you are working on a budget in a spreadsheet program and you want to show your boss the income projections you have developed. You want to send her just that portion of the spreadsheet with an explanatory memo. You simply get into the Note pad, type your memo, and incorporate that portion of the spreadsheet you want to show your boss. I won't go into the details of just how it is done, but it is delightfully easy to do.

The calculator is a full function calculator with a memory key. This program allows you to "export" a number from the calculator to your application program. Again, the procedure is easy to learn.

Now, let's say you are still working on that budget and your phone rings. It is an associate who wants you to have lunch next Thursday. You call up the calendar and check your schedule for that day. If you are free, you simply type in "Lunch with Lou" in the noon slot for that day. The appointment book is saved in a file and can be called up instantly for reference or for changes.

I find SIDEKICK so useful as to be almost indispensable. For that reason I have set up Autoexec.Bat (batch) files on all my application disks. Page 4-11 of the MS-DOS User's Guide you received with your QX-PC board tells you how to do this. Tell the batch file to display the date first so you can update it. You need the date to be current so the calendar subprogram will work properly. Next have the batch file load SIDEKICK and then load your application program. That way, you will have this elegantly crafted, inexpensive, and exceedingly useful program always at your finger tips, no matter what else you are doing. And then you'll understand all the fuss about SIDEKICK. ■

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Software Critics Agree

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NEW!

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—includes SmartPrint II Plus and Screen Smarts

Teach SmartKey to recall software commands, words, paragraphs, or entire pages of data at the touch of a key. Make a series of "smartkeys" out of most of the keys on your Epson. Store "smartkey" definitions in a special file. Call them up whenever you want to run a favorite program or work on a project. Imagine saving complex software command codes, boilerplate paragraphs, inventory numbers, or whatever, and then injecting any of them into your work with the stroke of a key. SmartKey will not interfere with the regular operation of your keyboard. Indeed, SmartKey enhances your keyboard.

The Critics on SmartKey

- "Excellent..." *InfoWorld*
- "Works like a charm..." *MicroSystems*
- "A must for every computer..." Peter McWilliams, author *The Word Processing Book*
- "SmartKey is a utility I recommend... ...The result is less frustration and greater speed and accuracy in entering data." John D. Yoder, PhD *Reviewer — Epson Connection*
- "...SmartKey is considerably easier to learn ...SmartKey would be my choice..." Bob Hermann *Reviewer — Epson Connection*

Central's super priced **$49** *SmartKey II* combo pak includes *SmartPrint II Plus*, a program that greatly enhances the operation of dot matrix printers, and a free copy of Paul Golding's $15.95 book, *Screen Smarts, The Computer Tamer's Guide*. This book tells how you can use SmartKey to turn your computer into a supercharged mean machine. Order today to get this hard hitting $115 software & book combo for only $49.

$379 IBM Computer

Turn your Epson into an IBM-type computer for only $379. Titan Technologies' new QX-PC2 is a popular snap-in card that fits into an easy-to-reach slot in your Epson QX-10. The QX-PC2 helps you make your Epson into a rip roaring IBM-type computer within minutes.

The QX-PC2 co-processor board is an expertly conceived component that contains the guts of an IBM computer. It includes a powerful 16-bit 8088 CPU. Comes standard with a full 192K of Ram, its own built-in memory, and is fully expandable to 512K Ram. Yes, your Epson is now clearly an excellent place to experience 16-bit processing without sacrificing your original investment in an innovative 8-bit computer.

"...the QX-PC2 is an inexpensive alternative to trading your QX-10 in on a 'newer' technology. It is a tool that once mastered will expand the QX-10 to a new level of computing. I would be lost without it."
— Jim Markevitch
— *Epson Connection*

Titan

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QX-PC2 OPTIONS GUIDE

Description	List	Prices
192K QXPC2	$ 595.00	$379.00
256K QXPC2	$ 670.00	$419.00
384K QXPC2	$ 895.00	$589.00
512K QXPC2	$1045.00	$649.00
128K Aux	$ 249.00	$189.00
256K Aux	$ 399.00	$312.00
Ram Software	$ 39.00	$ 36.00

192K	Standard MSDOS co-processor card.
256K	Standard card with more memory.
384K	Standard card and attached memory.
512K	Standard card. Maximum expansion.
128K Aux	128K Auxiliary card adds memory.
256K Aux	Auxiliary card adds memory.
Ram Soft	Ram disk software for card.

— All units fully supported by Titan.
— Complete 12 month factory warranty.

Titan's QX-PC 2 card includes:

- Simple snap-in installation
- Fast 5 MHz processor
- Runs MSDos and PCDos software
- Support for hard disk
- MS-DOS 2.11 operating system
- Parallel and serial port support

The QX-PC2 lets you operate software that other IBM-emulators can't. The QX-PC2 board lets you use virtually all the software written for the IBM PC including the tough stuff like Lotus 1-2-3, Symphony, dBase III, and Framework. Thousands of dedicated Epson users and corporations have found the QX-PC2 turns an Epson into a whole new exciting computer able to use thousands of IBM-type software programs. You will too.

Don't spend thousands of dollars on an IBM-type computer in a fast changing market when you can get one on a card, plug it into your Epson, and get identical results. It's easy to operate a world of 16-bit IBM-type software on your Epson with the QX-PC2 co-processor. In addition, with the QX-PC2 board in your Epson, you can still operate CP/M and TP/M software. You can't do that on a straight IBM machine. The retail price of Titan's new QX-PC2 card with standard 192K Ram, operating manual, and MS-DOS system disk is $595. Central Computer is proud to add Titan Technologies' products to our line. For a limited time only, Central's low introductory price to the standard QX-PC2 card is $379. Please see the *QX-PC2 Options Guide* above for information on optional features. Order today to begin experiencing IBM-type power on your Epson soon. Central will beat any advertised price on this unit. If you see a lower price, tell us. We'll beat it. It's time to upgrade that computer. Get the QX-PC2 board fast. In stock, ready for immediate delivery. Order today.

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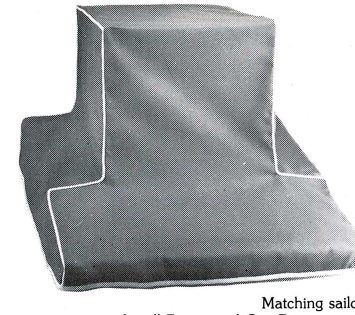
At last, the classic Epson dust cover you'll be proud to own and use. This first rate computer cover is made from a premium, lint free, static free, washable, free breathing, and fade resistant sailcloth. It comes in a rich looking Navy blue or Sand. The Navy cover has a smart contrasting silver gray piping and trim that adds a superior finished look. Not to be outdone, the Sand cover is handsomely finished in a rich chocolate piping and trim.

For a limited time only, your price for this factory direct, custom made, one-piece sailcloth Quality Cover is $18.95. When ordering remember to indicate color preference. This special low price is subject to change. You must be completely satisfied with your purchase of this cover or we will refund your money immediately. Order today.

Richly tailored inside and out. Look inside any of our Quality Covers; see the ultimate finishing; we use machines that sew with 3 needles so that edges will not unravel or shed lint. We stress perfection because you deserve the best. Compare for long-lasting satisfaction.

Photo: Form-fitting cover over CPU, monitor, and keyboard.



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Font is an easy-to-use software pa
compatible systems; no special hardv

Actual sample produced by an MX-80 and Fancy Font.

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Fancy Font styles include Roman, Bold, Italic, Script, Old English, and more. In addition, custom forms, invoices, labels, signs, foreign languages, mathematical notations, view graphs, resumes, newsletters, brochures, complete manuals, invitations, place cards, and high-resolution, proportionally spaced, letter quality business and personal letters can all be printed on your Epson printer with *Fancy Font* at the helm. *Fancy Font* is a product of SoftCraft Inc. You may have seen SoftCraft's national ads. They are printed with *Fancy Font* on an Epson printer. The ad is powerful visual medicine. The list price for the fully documented *Fancy Font System 2.0* is $180. Central's price is only $149. Order *Fancy Font* today and add an amazing sparkle of creativity to all your printed materials. Please indicate name and model of your printer when ordering. *Fancy Font* will make your Epson printer and Valdocs or CP/M word processor come alive. It's magical.

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CP/M	$ 39.95	$ 33.00
MBasic — **Training software.**	$ 39.95	$ 33.00
Multiplan — **Speeds learning.**	$ 75.00	$ 54.00
SuperCalc — **Gives fast results.**	$ 75.00	$ 54.00
Wordstar	$ 75.00	$ 54.00
BORLAND INTERNATIONAL		
Turbo Pascal 3.0	$ 69.95	$ 52.00
Turbo Toolbox	$ 54.95	$ 49.00
Turbo Tutor	$ 34.95	$ 32.00
CHUCK ATKINSON PROGRAMS		
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Screen Smarts, Computer Tamer	$ 15.95	$ 12.95

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Quick Check tells you exactly where your hard-earned money goes. *Quick Check* lets you set up your own expense and income codes, or use built-in codes, so you can start entering checks and deposits immediately. You don't have to know about accounting to use *Quick Check*. This common sense program gives you instant fingertip access to a wide range of information about your income and expenses. Single keystroke commands help you pay bills, keep track of deductible and non-deductible items, correct mistakes, change dates, and reconcile your checkbook. This program even prints checks and addresses them automatically. *Quick Check* is written in CB80 native code. It is fast, accurate, and forgiving. No slowdown for sorting.

Home and small business accounting can't get any easier than this. Please don't spend another moment thinking about computerizing your checkbook. You can start getting that checkbook in shape now. The list price of *Quick Check* is $95. Central's current price is $79. Order today.

Attention: The rewards of using *Quick Check* include saving time, money, work, discomfort, and worry about your money. *Quick Check* is absolutely the easiest full-featured money manager, check printer, and budget organizer available. Bar none.

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Now, Epson users can turn their computers into powerful text filing machines. *SuperFile* is a textual matter database manager unlike any other. It puts you in control of your information. It allows you to easily store and retrieve notes, letters, random thoughts, contracts, depositions, invoices, new product information, sales reports, reference articles, scripts, abstracts, bibliographies, customer profiles, photo or slide locations, and much more. *SuperFile* accepts as many as 65,000 entries per database; allows 512,000 keystrokes per record, each of which can have up to 250 keywords; and indexes information you've stored on as many as 255 diskettes per database. Powerful.

Input for a *SuperFile* database comes from your word processing Valdocs, CP/M, or MSDOS program, so you can easily include information you already have into a database without having to re-key it. No fancy fields to define. This is a completely free-form database system. No programming language to learn. There's nothing difficult here. You can be up and running within minutes. *SuperFile* uses logical searching procedures to find your information fast. Tell *SuperFile* what information you want, and it searches from 60 to 400 entries per second. Save yourself the time and effort of filing and cross-filing information by hand or in overly structured data fields. The list price of *SuperFile* is $195. Order today to get *SuperFile* at our current low price of $155.

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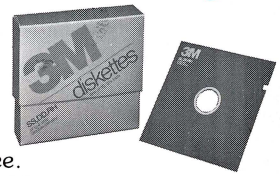

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Spreadsheet Applications With

Multiplan and PeachCalc

By John Yoder

At home a spreadsheet can keep track of your stock portfolio, create a budget, or track your savings. Here are two examples.

Using Multiplan, let's create a spreadsheet that shows your savings from year to year. First, on a piece of paper, sketch the titles you want to use for the columns. Get a general idea of how you want the sheet to look. That will save you from a lot of fumbling around when you start to format the spreadsheet.

Begin by formatting cells in row 1 columns 2, 3 and 4 to be continuous. Next format rows 4 and 5 to center the titles. Formats R7C2:R10C11 as integers and column 12 to show percentages. (See example.) I use the dash (-) and equal signs (=) to create divisions that make the sheet easier to read. Enter enough dashes to cover the first column, then copy them to the right 11 cells.

The formulas are relatively simple. In column 5 find the total liquid savings with the formula SUM(R7C2:R7C4) or point with the cursor and add columns 2, 3 and 4. The formula will read SUM(RC[-3]:RC[-1]). Column 8 totals columns 2, 3, 4, 6 and 7. The formula is SUM(R7C2:R7C4,R7C6:R7C7). Column 10 is the total of 8 and 9 or R7C8+R7C9.

To find the percentage increase for 1982, first subtract row 7 column 10 from row 8 column 10. Using the cursor to enter the formula results in RC[-1]-R[-1]C[-1]. That is the increase or decrease in the past year. The percentage increase is column 11 row 8 divided by column 10 row 7. Using the cursor to enter the formula we would see RC[-1]/R[-1]C[-2]. (That gives you some idea of what relative formulas look like in Multiplan.)

Here is a PeachCalc spreadsheet that keeps track of income and expenses for a home photography and writing business. Begin by entering the title in row 1, column A. PeachCalc will allow you to extend text beyond the normal width of a cell as long as nothing is in the next cell. Place your file title at the top (e.g., BUSINESS), since you will be using that title often when you save the spreadsheet. Enter a division line by striking an apostrophe, then an equals sign, then a return. Lock the top row in place through the "title" menu.

The rest of the sheet records transactions as they occur in whatever categories you choose to use. In this case rows 38 and 39 keep a running account of expenses and income in each category. In row 39 enter the formula SUM(C7:C23). Then repeat that formula in columns D, E and F, without adjustments. You arrive at total expenses by entering the formula C25+D25+E25+F25 or SUM(C25:F25). Use the same type of formulas to arrive at totals for the income columns. The profit or loss is F28-F27.

I like to know what percent each transaction contributes to the total income or expenses. With PeachCalc it is easy to arrive at that percentage. In column I row 8 enter the formula (C8+D8+E8)/F27*100 to arrive at the percentage for that cell. Repeat that formula down the column. After entering the range you want to copy to, ask for "adjusts" by pressing the comma (,). Adjust the cells inside the bracket, but do not adjust the F27.

These simple examples of spreadsheet use, even though they do not go beyond adding, subtracting, and dividing, can greatly increases your ability to analyze financial or other data because they permit you to make comparisons, sums, and categories you would not have attempted with a calculator. ■

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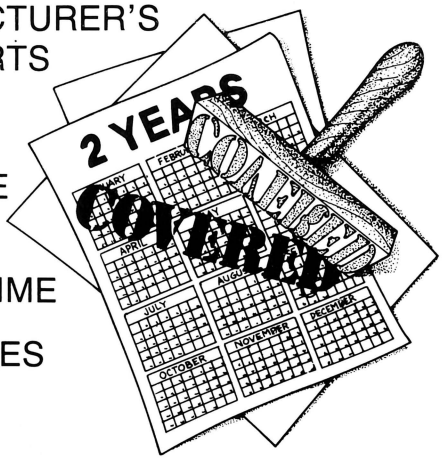

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EASD-120-785-1

Tape of the Month #10

This month's tape contains the following public domain files:

LASM.COM - Public domain version of ASM.COM. Documentation assumes familiarity with ASM, so we would recommend you purchase a CPM reference book to make the fullest use of this program (see RX for PX for further suggestions).

LOAD.COM - CPM loader, for use with LASM.COM.

PFK.ASM - Function key redefinition program contributed to the public domain by David Kozinn. See this month's RX for PX for more details.

PATCHPX.COM - 22K Version of the DDT like program installed for the PX-8. Still uses a 24 line screen, requiring you to use CTRL-cursor key to scroll up and down the display.

To order the Tape of the Month, please send a check or money order for $10 to the EpsonConnection, Tape Service Department, P.O. Box 14027, Detroit, MI 48214, Please be sure to indicate the tape order number (TOM-10) with your payment.

Disclaimer: All of the programs and documentation on this tape are known to be public domain and no warranties are expressed or implied. All of the programs have been tested on the Geneva PX-8, and are known to run. Public Domain programs are programs written by other users, for public use at little or no charge, other than that for handling, mailing and materials. **Note:** We imply no similarity, or advise any comparison, between public domain software and software that is commercially produced. A beginning knowledge of CP/M is also recommended to utilize this software.

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Rx for PX

by Bob Hermann

The Retriever

If you have ever trashed a microcassette by inadvertently DIRINITializing a tape with useful files on it, or have otherwise rendered a tape useless by corrupting its directory, then we have something for you .... The Retriever. Written in BASIC this program accomplishes something even the programmers at Epson America couldn't: the recovery of files from a microcassette with an erased or unreadable directory.

The process The Retriever uses to recover the directory requires operator assistance. The program "plays" the tape on the PX-8 speaker. The start and end of files, as well as the record count of each file are indicated by tone differences. By depressing the required keys, the operator indicates to the program the beginning and end of each file on the tape and the number of records. Operator counting of records is necessitated because the different modes of tape operation (stop and non-stop) use different amounts of tape, thereby rendering any formula for determining records from the tapecount, worthless. The program then verifies each file and writes a directory of the files (with the generic names F1.RET, F2.RET, F3.RET etc.,) to the tape.

The software itself is menu driven and quite easy to follow. We suggest you listen to a tape first without trying to input anything to the program in order to familiarize yourself with the sounds that you will hear. Because of the constant use of the speaker and cassette drive, it is almost necessary to have the battery charger plugged in whenever using The Retriever. The program can not recover data that have been magnetically altered, nor will it function with a physically damaged tape.

Even with the safety features for tape operations implemented on the revised operating system for the PX-8, The Retriever is a program that no PX owner should be without. You may never need to use it, but that one time you do makes the bargain basement price of $12.50 a wise investment. For more information or ordering, contact WHALESONG SOFTWARE, P.O. Box 1183, Franklin PA 16323 (412-376-3627).

Installing Turbo Pascal On the PX-8

One of the most popular software products of 1984 was Turbo Pascal from Boreland International. The following instructions indicate the installation procedure for using this program on the PX-8. The licensing agreement for the software does indicate that the package may be used on only one CPU. Boreland states that they are not against the transfer and use of Turbo Pascal on the PX-8 as long as only one copy of the program is operational at any one time. They were even curious about the installation steps themselves.

All of the user input contained in the following instructions will be in **bold.** The installation program Borland provides with Turbo begins by listing 30 terminals to choose from for the installation. Selection 21 should be **Soroc 120, Apple CPM,** and is the proper choice for PX-8 installation. Then, you are asked if you want to modify this definition before installation. Answer with a **Y**. Enter **PX-8** or **Epson PX-8 -- Ain't it Great** for the terminal type. Next comes an inquiry about sending an initialization string to the terminal. Answer **Y**. You will enter the following at the 'Change to:' prompt: **27 208 0 40 8 27 209 1 27 243 4 19 5 24 0.**

Next, you must change the reset string in a similar manner. Answer **Y** to the 'Send reset string to the terminal?' question. Enter **27 209 0 27 243 28 29 30 31** at the 'Change to:' prompt. Now you may just hit the **RETURN** key (accepting the default values) for the remaining questions until you see the one about screen length - answer **8** for this one. When finished, the program will ask you if the definition is correct. A negative answer will send you through the procedure again, while a positive one will illicit a question about the nature of the hardware. You will be asked for the operating frequency of your microprocessor. Answer **3** to this, and **Q**uit the installation program and you should have Turbo Pascal operational on your PX-8. More experienced users can then use DDT or PATCH (a version of PATCH is on this month's tape) to remove the extra line feeds from the Turbo menus so that they will appear on one screen.

PFK - Re-define the PX-8 Function Keys

The listing in figure 1 is the assembly language code (referred to as an .ASM file) for a program written for the PX-8 by David Kozinn (the comment lines have been removed to conserve space). It is a simple but very useful program which redefines the PX-8 function keys. You can see in the tail end of the listing exactly how the keys will be defined by this version of the program. It is not an executable program. 'Assembling' and 'loading' the file will produce an executable .COM file that will redefine the function keys as indicated.

Not everyone will want to use the key definitions given in this listing. You may customize the program to your needs by editing the last lines of the .ASM program with your own key definitions and then assembling and loading this file. For many PX owners this may present a small problem. The ASM.COM program needed to accomplish the 'assembling' is distributed only on the system disk that accompanies the PF-10 floppy disk drive. It is NOT a public domain program, so we can not distribute it to you on a tape of the month, and you shouldn't be able to find it on any RBBS's. That renders the above program quite useless

unless you have the disk drive or another CPM computer with ASM.COM. There is a public domain version of ASM.COM called LASM.COM that we will distribute on this month's tape along with PFK.ASM, making the above program file useful to more PX owners. You should be forewarned that the documentation for the LASM program assumes some familiarity with ASM. It is strongly suggested that unless you are familiar with ASM that you invest $15--$20 in a book such as *CP/M and the Personal Computer* (Addison-Wesley, ISBN 0-201-10355-9) by Dwyer and Critchfield, or *CPM Bible* (Howard W.Sams & Co., ISBN 0-672-22015-6) by Waite and Angermeyer.

Now let's go through the customization of PFK a little more thoroughly. If you don't really want to be bothered with learning all about LASM (or ASM), these instructions will provide enough information to allow you to customize PFK.

The part of the program that requires editing is listed below:

```
pfk1:   db  pfk2-pfk1-1,'dir '
pfk2:   db  pfk3-pfk2-1,'type '
vpfk3:  db  pfk4-pfk3-1,'c:stat '
pfk4:   db  pfk5-pfk4-1,'c:pip '
pfk5:   db  pfk6-pfk5-1,'battery',0dh
pfk6:   db  pfk7-pfk6-1,'modem t',0dh
pfk7:   db  pfk8-pfk7-1,'modem r '
pfk8:   db  pfk9-pfk8-1,'modem s '
pfk9:   db  pfk10-pfk9-1,'c:term',0dh
pfk10:  db  last-pfk10-1,'c:config',0dh
```

Figure 1

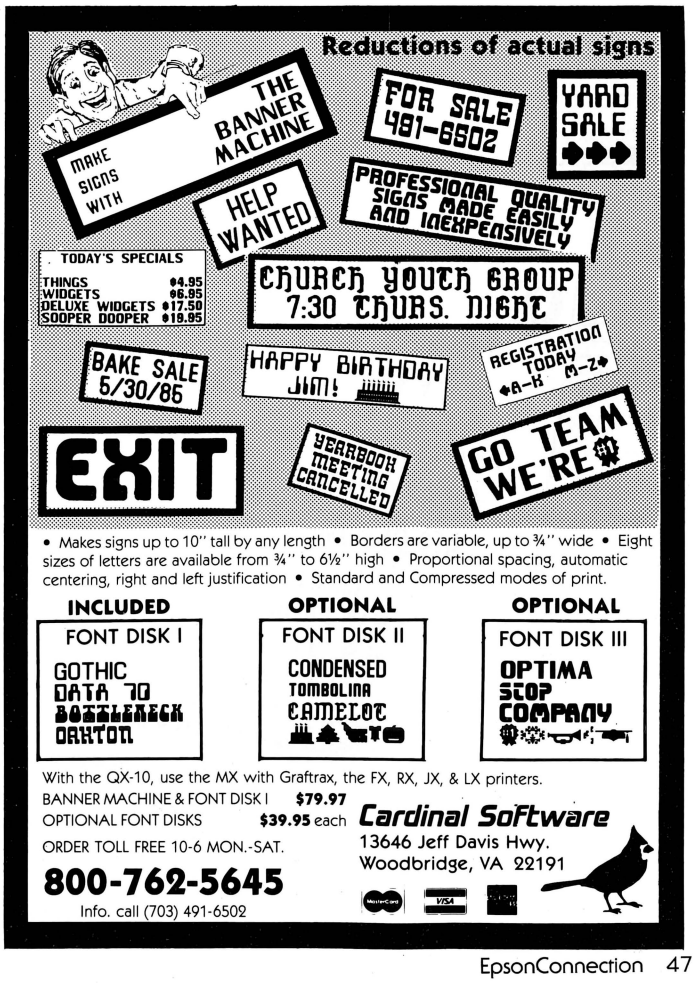
```
OFFSET    equ  6CH       ;PUTPFK BIOS routine offset from WBOOT
ON        equ  0         ;Value for pfk display ON
OFF       equ  1         ;Value for pfk display OFF
DISPLAY   equ  OFF       ;Set display to ON or OFF for pfk display
BDOS      equ  5
PRINT     equ  9
          org  0100h
          lxi  d,disppfk
          mvi  c,print
          call bdos      ;Send the display string to the console
          lhld 1         ;Get BIOS WBOOT address
          mov  a,l
          adi  offset    ;get address of the PUTPFK BIOS call
          mov  l,a
          shld putpfk+1  ;modify the call address
          mvi  c,0ffh
          lxi  h,pfk1
loop:     inr  c
          mov  a,c
          cpi  10
          rz
          push b
          push h
putpfk:   call 0000      ;<----MODIFIED ADDRESS!!!!!
          pop  h
          pop  b
          mov  a,m       ;get string length
          add  l
          inr  a
          mov  l,a       ;put computed string length back
          jmp  loop

disppfk:db   1bh,0d3h,display,'$'  ;Function key display

on/off

pfk1:   db  pfk2-pfk1-1,'dir '
pfk2:   db  pfk3-pfk2-1,'type '
pfk3:   db  pfk4-pfk3-1,'c:stat '
pfk4:   db  pfk5-pfk4-1,'c:pip '
pfk5:   db  pfk6-pfk5-1,'battery',0dh
pfk6:   db  pfk7-pfk6-1,'modem t',0dh
pfk7:   db  pfk8-pfk7-1,'modem r '
pfk8:   db  pfk9-pfk8-1,'modem s '
pfk9:   db  pfk10-pfk9-1,'c:term',0dh
pfk10:  db  last-pfk10-1,'c:config',0dh
last:   equ $
        end
```

Say you have a customized utility ROM in the I drive, making the above definitions worthless. Enter WordStar and indicate at the main menu that you wish to edit a document in the non-document mode by hitting N and then entering PFK.ASM for the filename. Use CTRL-C to page down to the part of the program indicated above. Position the cursor on the 'd' of 'dir' on the first line and enter bat (for BATTERY.COM). Then hit CTRL-G 3 times to delete 'dir' (but not the apostrophe). Then, space past the apostrophe and enter a comma followed by 0dh (which indicates a carriage return in HEX). The first line should now look like this:

```
pfk1:dbpfk2-pfk1-1,'c:bat ',0dh
```

PF1 is now re-defined to be "c:BAT <cr>". We continue in this fashion to redefine PF2 to "c:FILINK <cr>",PF3 to "c:CONFIG <cr> and so on. Save your new PFK with CTRL K X.

Now we're ready to use LASM (or ASM). LASM is a CPM assembler; it allows the writing of programs in humanly decipherable format. LASM generates two files from a program listing such as that above -- a PRN file (the machine language program in human readable form) and a HEX file (the source program, or object code). But neither of these is in a form that the computer can understand. One more step is necessary. The HEX file must be converted into a COM file that the computer can load and run whenever this file name is entered (like PIP, STAT, WS etc.). LOAD.COM (also on this month's tape) accomplishes this conversion of the ASCII HEX file into an executable COM file.



If you do not have a memory expansion unit, set your RAM (or A) drive to 24K with CONFIG and then pip your customized version of PFK.ASM, LASM.COM, and LOAD.COM to this drive. You will need at least 12K of free space for all the files that will be generated. Now invoke LASM by entering at the "A>" prompt:

A>lams pfk

and you will see:

```
LINKASM AS OF 7/06/81

PFK
PFK
017E
001H use factor
48 input lines read
End of assembly
```

If you are using PFK.ASM with all the comment lines removed, (on the unedited PFK version you will see '63 input lines read'). If you now do a 'dir' you will see the two files created by LASM -- PFK.PRN and PFK.HEX. Now create the COM file by entering at the 'A>' prompt:

A>load pfk

and you will see:

```
FIRST ADDRESS     0100
LAST ADDRESS      017D
BYTES READ        007E
RECORDS WRITTEN 01
```

Now you have your own customized version of PFK.COM. Let's examine the two files that LASM created. Looking at a portion of the PRN file we see that it shows both the ASM listing on the left and the corresponding machine language translation of the program produced by LASM on the right.

```
006C =          OFFSET  equ  6CH         ;PUTPFK BIOS routine offset from
                                          WBOOT
0000 =          ON      equ  0           ;Value for pfk display ON
0001 =          OFF     equ  1           ;Value for pfk display OFF
0001 =          DISPLAY equ  OFF         ;Set display to ON or OFF for pfk
                                          display
0005 =          BDOS    equ  5
0009 =          PRINT   equ  9

0100                    org  0100h
0100 112A01             lxi  d,disppfk
0103 0E09               mvi  c,print
0105 CD0500             call bdos        ;Send the display string to the
                                          console
0108 2A0100             lhld 1           ;Get BIOS WBOOT address
010B 7D                 mov  a,l
010C C66C               adi  offset      ;get address of the PUTPFK BIOS
                                          call
010E 6F                 mov  l,a
010F 221F01             shld putpfk+1    ;modify the call address
0112 0EFF               mvi  c,0ffh
0114 212E01             lxi  h,pfk1
0117 0C         loop:   inr  c
0118 79                 mov  a,c
0119 FE0A               cpi  10
011B C8                 rz
011C C5                 push b
011D E5                 push h
011E CD0000     putpfk: call 0000        ;<----MODIFIED ADDRESS!!!!!
```

This gives the programmer a listing of what LASM did with his program, and is a valuable debugging tool.

Now if we look at the HEX file we will see:

```
     a
    /   \
   /     \ b c d e f g h i j k l m n o p q r
  /       \/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\
:10010000112A010E09CD05002A01007DC66C6F225F
:100110001F010EFF212E010C79FE0AC8C5E5CD0096
:10012000E1C17E853C6FC317011BD3012404642 9
:1001300069722005747970652007633A737461747D
:100140002006633A706970200862617474657279 80
:10015000D086D6F64656D20740D086D6F64656DBD
:10016000207220086D6F64656D2073200763 3A74F8
:0E017000657 26D0D09633A636F6E6669670D07
:0000000000                    \       /
                                \     /
                                 \   /
                                  \ /
                                   s
```

Each line of the file is organized as follows:

a: The colon at the beginning of each line indicates the beginning of a record. The first 2 digits after the colon indicate the length of the record in HEX. Here the record length is 10 HEX (16 in decimal). Following this are 4 digits (0100) that tell the 'loader' the starting location in memory where the machine code of the record is to be stored.

b-q: The program per se; each line contains 16 decimal (10H bytes) of the machine language program. Correlate this with the left portion of the PRN file.

r: Checksum.

s: Portion of the data to set the function keys to.

This file is in what is known as Intel Hex format. All of the characters are ASCII, and each line contains checksum error detection, allowing it to be more inter-computer transferable than a COM file. It is also possible to print or view this file, something that cannot be done with COM files. This is the type of file that is 'burned' into our personalized ROMs. ■

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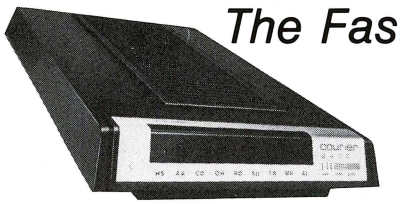

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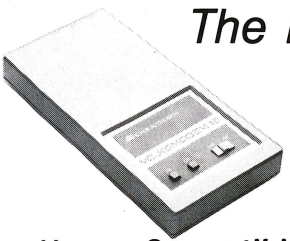

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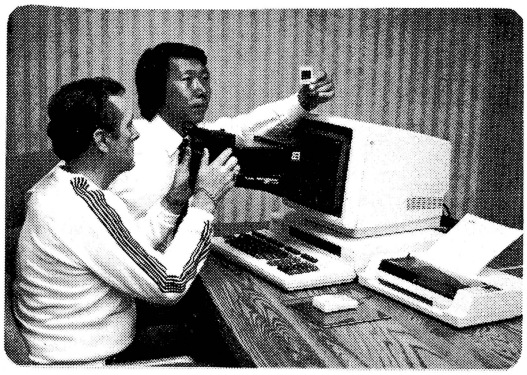

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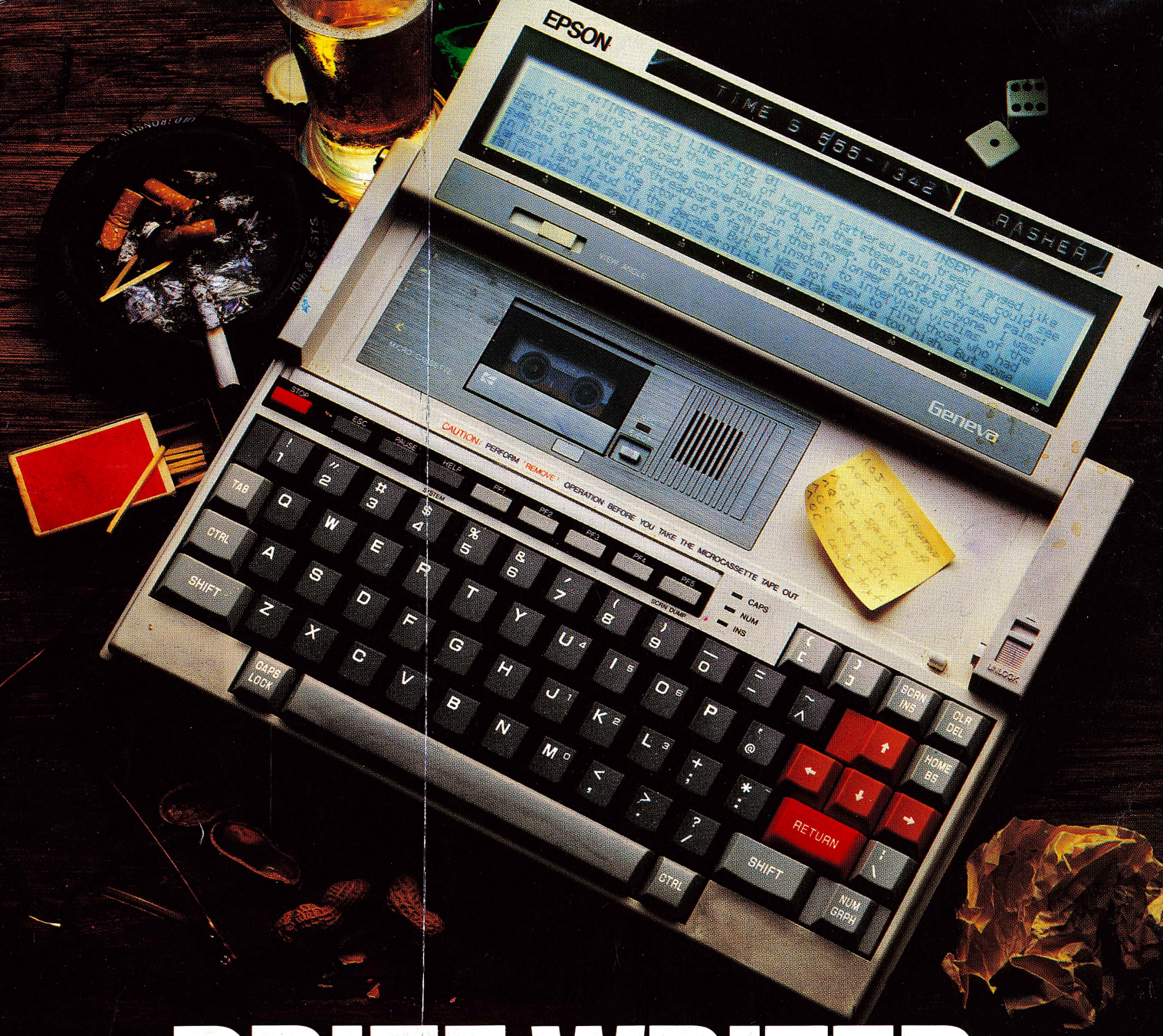

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